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WAMPUM BELT
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ANNUAL

Archæological Report

1911 - 1912

Including 1908-9-10.

Part I
BEING PART OF

Appendix to the Report of the Minister of Education, Ontario.

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THE LEGISLATIVE ASSEMBLY OF ONTARIO.



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PRESENTATION.

To the Honourable R. A. PYNE, M.D., LL.D., M.P.P., Minister of Education.

SIR,—I have the honour to herewith submit the Archæological Report of the Provincial Museum for the years 1908-9-10-11.

The total number of specimens added during these years number 2,800.

I have the honour to be,

Your obedient servant,

ROWLAND B. ORR.

Nov. 30. 1911.

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"Back, since ages at whose birth we can only guess, but which in all human probability go deeper into the past than the reign of Arab in Yemen, or Kirghis in Turkestan, the wild red man has roamed these wastes: back into that dark night which hangs for ever over all we know or shall know of early America. 'The time before the white man came,' what a measureless eternity lies hidden under the words! This prairie was here when the stones of the pyramids were unhewn, and the site of Babylon was a river meadow—here as it is to-day, treeless, desolate, and storm-swept. But where and whence came the wild denizens of the waste? Who shall say? Fifty writers have broached their various theories, a hundred solutions have been offered. The missionary claims them as the lost tribes of Israel, one ethnologist finds in them a likeness to the Tartar, another sees the Celtic eye, another the Roman nose, another traces them back to Japan, or China, or Australasia; the old world is scarcely large enough to give them room for their speculations. And what say we? Nothing; or if aught, a conjecture perhaps more vague and shadowy than the rest. It has seemed to us when watching this strange wild hunter, this keen, untutored scholar of nature, this human creature that sickens beneath our civilization, and dies midst our prosperity—it has seemed to us that he was of a race older and more remote than our own, a stock co-eval with a shadowy age,—a remnant, perchance, of an earlier creation which has vanished from the earth, preserved here in these wilds—a waif flung by the surge of time to these later ages of our own.

"This new world is older than our old one. Its 30,000 feet in depth of Azoic rock tell us of an age when nought of living form moved over the iron earth. And here, probably first of all, the molten sands rose above the boiling floods, and cooled and crusted into a chaotic continent.

"These are but idle speculations; still the antiquity of the Indian race rests upon other foundations. Far to the South, where the prairies rise into the lofty plateau of New Mexico, ruined monuments, weed-grown, and hidden beneath ivy and trailing parasites, stand like spectres from the tomb of time. Before these mouldering rock-hewn cities conjecture halts; the past has drawn over them a veil that no research can pierce, no learning solve. Inscrutable as the vestiges of an earlier earth they stand, the lonely, ruined wrecks of the Red man's race." —Butler, in "The Wild North Land."



David Boyle.

*I join would hope that Death does not end all,
But if I'm wrong and worst should come to worst
Shall I be blamed for what I could not see?
Shall I be asked why I did not from first
Believe with others what seemed wrong to me?
David Boyle.*

DR. DAVID BOYLE.

The late Superintendent of the Provincial Museum was born at Greenock, Scotland, on May 1st, 1842. He received his early education at Mason's Hall school, in his native town. With his parents he came to Canada in 1856, and settled at Elora, Ont. Shortly after, he was apprenticed to his uncle, a blacksmith, at the village of Eden Mills, in the Township of Eramosa. Some time after, he returned to Elora, attending the old Grammar School, where he was thoroughly grounded in all those branches of education which were then considered necessary to procure a teacher's certificate. His first school was at Middlebrook, where he continued to teach until 1871, when he was appointed principal of the Elora Public School; when he first made his presence felt by organizing the present Elora Library—using the old books found in the school as a nucleus, and working with untiring energy—he soon had what he dearly longed for, the material to advance his scientific knowledge. He early became a close student of biology and geology. The forms of life which left their imprint on the limestone rock of the Grand River gave him a large and varied field for investigation.

It was in those days, when his keen scientific eye was upon the progress of modern science in the old world, that his attention was attracted by the researches in the vast mines of ancient Chaldea. The epoch-making discoveries of Botha and Layard in the royal palaces of Khorsabad and Nimrud had created an extraordinary enthusiasm throughout Europe, and left its impress on the mind of the embryo archæologist in his beloved library at Elora. Soon we find him following the example of those sages of the East, and gathering together all the material he could find of the Prehistoric Races of his adopted land; and here was laid the foundation of what is now one of the finest American archæological collections in the world.

In 1875 he left Elora, and opened a book store on Yonge Street, Toronto. He brought with him his extensive and very valuable collection of Indian relics—these, after a short time, he presented to the Canadian Institute, and thus was created the nucleus of the present Provincial Archæological Museum, which now, mainly through his efforts, ranks among the finest on the continent of America.

In the early days, there was but little enthusiasm shown by the members of the Canadian Institute. The commercial pursuits of a young country occupied too much of their time to allow them to devote any of their energies to husbanding the material to illustrate aboriginal life on this continent. Some years before, Sir Sandford Fleming had made the attempt, in connection with the Institute, to get a collection together; but it met with no measure of success. Prof. Vander-Smissen, when President of the Canadian Institute in 1886-7, had the pleasure of seeing the collection in the attic of the old Institute building at the corner of Berti and Richmond Streets grow in importance, under the guidance of Mr. Boyle. In 1885 a grant was received from the Government of \$1,000, which was continued for some years. Most of this grant was expended for field work, little, if any, going to the worker—Mr. Boyle still giving his time free of all charge, and oftentimes spending his own limited means in furthering his beloved work. The removal of the collection from the Canadian Institute to the Museum in the Normal School; the appointment of Mr. Boyle as Director of the same; marks the real commencement of the Archæological Museum, and from this time it began to grow by leaps and bounds; and though his salary was but a mere pittance, yet all his time and energy was devoted to his work. He superintended the opening of ossuaries; the sifting

of ashes where the Indian houses stood; the careful examination of mounds, pits, and fortifications; nothing that pertained to unveiling the habits and customs of the Indians missed his careful eye. He visited archæological collectors in various parts of the Province, convincing many of them that the proper place for all such collections was in the Provincial Museum. That he was successful, is to be seen by the collection he has left behind him. Nine hundred specimens in the Canadian Institute, and over thirty-two thousand in the present Provincial Museum, are evidences of the enthusiasm of the man, and his great ability as a collector. We thus see him forge his way ahead, from a small collector and an unknown teacher, until we find him at the head of the Archæological Department in the Provincial Museum.

Dr. Boyle was a man of sterling character, a telling and incisive public speaker, possessed of a singular and telling humor. He was in private life the most genial of story tellers, his remarkable memory contributing, perhaps, more than anything else to his public success. His mind was a repository of the wit and wisdom, not only of his native land, but the best things of Europe. He was essentially Scotch, cautious, prudent, determined, and with that strange, quiet, good-fellowship that distinguishes those of his race. He was a welcome guest wherever Scotchmen were gathered together, and when speech and story went round on St. Andrew's night, no one was more impressive or more enthusiastically received.

His literary and scientific works brought to him the honours many Societies all over the world were proud to confer. To increase his honours, the Provincial University of his adopted Province called a special meeting of the Senate, and, as the shades of night were fast closing around him in his sick room, they conferred upon him the degree of LL.D.

This is not the place to give the life history of one of Ontario's great men. We can but say, that amongst the many *litterateurs* Scotland has sent forth to all parts of the world, there are few who have equalled David Boyle.

ARCHÆOLOGY OF THE PROVINCE OF ONTARIO.

In American Archæology, man in the cultural process is the unit of investigation. This establishes the limit of the science. It aims at a reconstruction and interpretation of the order of civilization existing in America before the European occupancy. That civilization in this Province had never attained a position higher than semi-barbarism. Numerically, this Province was never largely populated, and at most, before the downfall of the Huron nation, had not more than 50,000 souls.

In his excellent report (1910) Mr. Frank Pedley, Deputy Superintendent General of Indian Affairs, gives the native population at 22,563, with a birth rate of 730 and a death rate of 559, showing that at least in this Province, "The Noble Red Man" is more than holding his own. But as we look abroad and see the amalgamation of the races steadily going on we must recognize the fact that it is only a matter of time until the Indians as a native race will have disappeared; consequently, it is of the utmost importance that their Ethnological and Archæological remains should be well looked after. National pride demands that this Province be not behind some of the sister States of the American Union in placing in its Museum a collection that will be surpassed by no museum in the world.

The Archæological collections from the ruins of the ancient Eastern world are all right in their place, but as Canadians, as citizens of the New World, it is our duty to guard most carefully the archæological remains of those races who

preceded us on this continent. And probably the time may come when we can lay down with accuracy the connecting links between the Eastern and Western civilization. In no way can this be accomplished so well as by the close study of the remains of semi-civilized, as well as civilized races on both sides of the Atlantic. The day may come when, from the ocean bed of the Atlantic, the resurrected remains of the ancient Atlanteans may give to us a history that will revolutionize our ideas of the ancient world. As our aeroplane now soars aloft, and the occupant thousands of feet above us, gazes down upon the little world beneath him, so in time, some Archæological genius may devise means of descending into the depths of the deepest ocean, and presenting to a wondering world the history of the buried cities of the past. Or, maybe, some convulsion of nature, such as has occurred in the past, may disentomb those cities which it submerged thousands and thousands of years ago.

But our duty at present is to travel along the beaten paths and build up therefrom the history of the ancient races on this continent. From Patagonia to the Yukon their footprints are to be found; from the ruins of the stately palaces of the Incas and Toltec, to the common village Long House of the Huron and Iroquois, we have but to gather the handiwork of their artisans and sculptors, the paintings of their artists, and the ornaments and weapons of their nomadic tribes. Time and research will do the rest.

QUEENSTON HEIGHTS.

The last field work done by the late Dr. Boyle was in April, 1908, when he was informed by Mr. C. A. Case, of St. Catharines, that the workmen of E. D. Lowery, contractor, had brought to light quite an extensive burial ground on that part of Mr. Lowery's property formerly known as the Dorchester farm, situated on Queenston Heights, near the village of St. David's, and within a short distance of the Falls. The following report of the work done at the time was left by him:

"The discovery was made by the men who were engaged in 'stripping' the ground, that is, removing the surface, to get at the underlying coarse, sharp sand, which is of excellent quality for building purposes, and has been worked close by, to a depth of a hundred and seventy feet. Mr. Case, with the co-operation of Dr. E. Jessop, M.P.P., secured from Mr. Lowery permission for this Department to examine the ground, and to appropriate anything we might find for Provincial Museum purposes.

"It was somewhat unfortunate for us that we did not receive the information at an earlier date, for, on reaching the ground, we found it occupied by a large number of men and boys—some even from the United States—who were making havoc of the graves. These people were merely curiosity hunters, and as a matter of course, were quite successful in finding and carrying away a considerable number of excellent specimens, but they also succeeded in putting the ground in such a condition that no one could make any intelligent examination of it. The bodies had not been buried in any regular way. However, from what appeared, it seemed evident that in accordance with the custom of Indians of Huron-Iroquois stock, the Attiwandarons had chosen this place as a burial ground, because it was the highest obtainable for such a purpose in that part of the country. This, added to the fact that digging into the sand was very easy, made it a favorite place of burial; for its area of some five or six acres showed that it had been in use for a long time, perhaps even by those who lived east of Niagara River, in the State of New York.

"The interments in many cases took place subsequent to the European invasion, as is testified by the contents of the graves, containing as these do, brass kettles, glass beads, and traces of metallic iron. In some cases these have been deposited along with articles of purely native fabrication, but in a few instances the graves contained no traces of European presence. This condition makes it clear that the ground was used for burial purposes before, as well as after, the arrival of the French, perhaps as recently as the time of British occupation. The land on which the burying ground is situated is at an elevation of some 700 feet above sea level, and not less than 500 feet above Lake Ontario, which is only about eight miles distant to the north: Lake Erie, to the south, is at least twenty miles off. From the Indian cemetery, Lake Ontario is plainly visible. Only three miles to the east, Niagara River flows north, while the Great Fall is not more than six miles away to the south-east.

"When the aborigines were supreme, this was probably one of the most densely populated districts in North America. If, as has been stated, there ever was a time when the Niagara Peninsula was treated, even in some small measure, as neutral ground, this would account to some extent for its popularity as a place to live in, more especially if the natives regarded the vicinity to the Falls with any superstitious feelings; and it is pretty well known that the mighty Cataract did inspire some sentiments of this kind on the part of the Iroquois whose country lay on both sides of the river gorge. However this may have been, it is quite evident that here we have what was a favored burying place for many years, indeed, the most extensive Indian burial ground so far as known in this Province.

Conchs (*busycon perversum*), and several personal ornaments made therefrom, were found in some of the graves. This would indicate a period probably not very remote from the date when this kind of aboriginal trade was carried on—when native copper and northern furs were bartered for material to make wampum, long-house trumpets, gorgets and various kinds of ornaments."

The most remarkable and wholly unique specimen found on this Lowery property was made of native copper. At first sight it (figure 28771), has the appearance of being made from European sheet copper, nearly one-eighth of an inch in thickness, but closer examination leads to a different conclusion. Its length is almost eighteen inches, and it varies in width from two inches at one end, to four and a half inches at the other. For fourteen inches of its length, measuring from the narrow end, the edges are fairly straight, although diverging slightly, but near the end it is flared a little as a result of hammering when cold. Indeed, many portions of the surface bear marks of similar treatment, as is attested by the presence of scales, or small laminations. If produced from a lump of native metal it represents an enormous amount of labour, and of skilled labour at that. Few marks of tools remain on the surface—none prominently—which is no doubt owing to the fact that much rubbing has been done with some abrasive material, the scratches made by it being yet traceable on some parts of the surface. The opposite and smaller end has also been beaten to little more than half the thickness of the main body, but here there is nothing like flaring. Perhaps this end was small when the copper was in its unworked state, and was simply beaten to make it wider but we cannot tell without seeing other specimens of a similar kind, any more than we can do anything but guess at the use to which the article was applied. Nothing like it has heretofore come into our hands, and no reference to anything of the kind has occurred in reading. Meanwhile, we regard it as a welcome addition to our slender, but valuable copper collection.



Fig. 28771—Half diameter.

MURRAY COLLECTION.

In 1908 the late Mr. Boyle procured from Mr. William Murray, of Clachan, County of Kent, some 1,800 specimens of Indian artifact. Mr. Murray for over thirty years had been an enthusiastic and untiring collector, and to men like him this Museum is indebted for much of the valuable material contained therein. The collection was mostly made in the Townships of Howard, Orford, Aldborough and Dunwich. Some were procured from north of the river Thames in Mosa Township, and the banks of the river were investigated as far as Lake St. Clair. Mr. Charles N. Mitchel, of Lakeside, himself an enthusiastic and intelligent collector, frequently accompanied him.

Most of this collection is from the territory of the Attiwandarons, and are largely surface finds, being turned up by the plough, and with few exceptions the ceremonial specimens are made of striped slate (Huronian), which is not only in many instances beautifully veined (resembling wood), but is easily worked, and takes a very handsome finish when polished. Many of the forms in this collection are novel to the Museum, and indicate no small degree of art taste on the part of the makers, as may be seen from the accompanying illustrations. They cover almost every form of stone work manufactured by the native races residing within the bosom of the Great Lakes.

I think it has been remarked by a writer in one of the books of the "Jesuit Relations" that the Neutrals or Attiwandarons displayed more than the usual amount of care on the production of their stone weapons and ornaments. However this may be, there can be no doubt that the people in question did bestow great pains in this way. It has been our fortune to obtain collections from the extreme east and west of the Attiwandaron territory, and a very casual examination of the material will bear out the truth of this observation respecting the workman's skill and patience.

ATTIWANDARONS.

"An important confederation of Iroquoian tribes, living in the seventeenth century, north of Lake Erie, in Ontario, having four villages east of Niagara River on territory extending to the Genesee watershed; the western bounds of these tribes were indefinitely west of Detroit River and Lake St. Clair. They were called Neutrals by the French, because they were neutral in the known wars between the Iroquois and the Hurons. The Hurons called them Attiwandaronk, denoting 'they are those whose language is awry.' Champlain, reporting what he saw in 1616, wrote that the 'Nation Neutre' had 4,000 warriors and inhabited a country that extended 80 or 100 leagues east and west, situated westward from the lake of the Seneca. They raised a great quantity of good tobacco, the surplus of which was traded for skins, furs, and porcupine quills and quillwork, with the northern Algonquian peoples. This writer said that the Indians cleared the land with great pains, though they had no proper instruments to do this. They trimmed all the limbs from the trees, which they burned at the foot of the trees to cause them to die. Then they thoroughly prepared the ground between the trees and planted their grain from step to step, putting in each hill about ten grains, and so continued planting until they had enough for three or four years' provisions, lest a bad year, sterile and fruitless, befall them.'



Fig. 29195—Full size.



Fig. 29200—Full size.

“The Rev. Father Joseph de la Roche Daillon, a Récollect, spent the winter of 1626 among this people. He was adopted by the tribe, being given to Tsohahissen (Souharissen?), the presiding chief. Daillon says of the Neutrals: ‘They are inviolable observers of what they have once concluded and decreed.’ His ‘father and host,’ Tsohahissen, had ever travelled among all neighboring tribes, for he was chief not only of his own village, but even of those of the whole tribe, composed of about twenty-eight villages, villas, and towns, constructed like

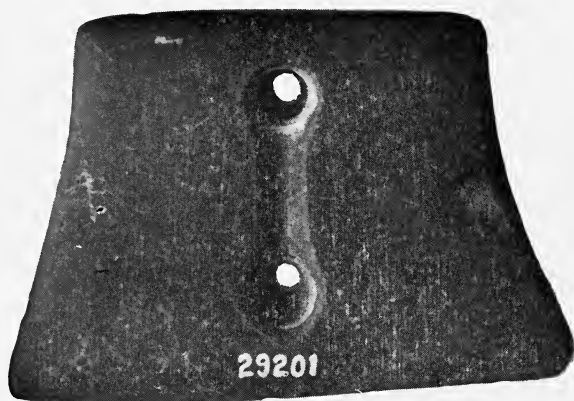


Fig. 29201—Full size.

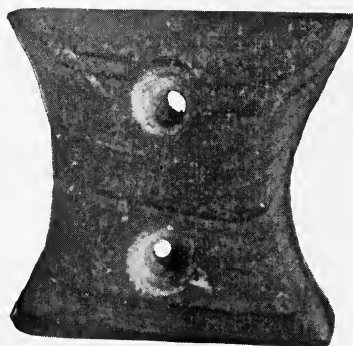


Fig. 29202—Full size.



Fig. 29205—Full size.

those of the Hurons, besides many hamlets of seven or eight lodges for fishing, hunting, or for the cultivation of the soil. Daillon said that there was then no known instance of a chief so absolute; that Tsohahissen had acquired his position and power by his courage and from having been at war many times against seventeen tribes, and had brought back heads (scalps?) and prisoners from all. Their arms were only the war club and the bow and arrow, but they were skilful in their use. Daillon also remarked that he had not found in all the countries visited by him among the Indians a hunchback, one-eyed or deformed person.

"The father declared that there were an incredible number of deer in the country which they did not take one by one; but by making a triangular 'drive,' composed of two convergent hedges leading to a narrow opening, with a third

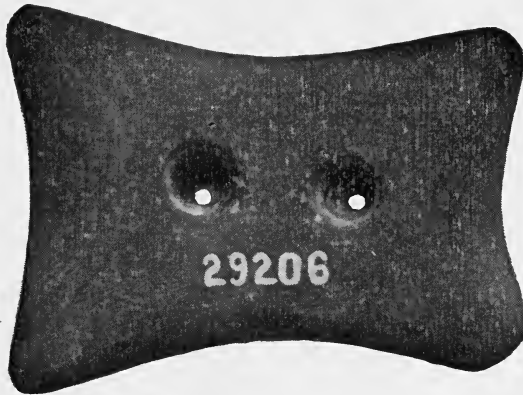


Fig. 29206—Full size.

hedge placed athwart the opening but admitting of egress at each end of the last one, they drove the game into this pen and slaughtered them with ease. They practised toward all animals the policy that, whether required or not, they must kill all they might find, lest those which were not taken would tell the other beasts that they themselves had been pursued, and that these latter in time of need would not permit themselves to be taken. There were also many elk, beaver, wild-



Fig. 29208—Full size.

cats, black squirrels, bustards, turkeys, cranes, bitterns, and other birds and animals, most of which were there all winter; the rivers and lakes were abundantly supplied with fish, and the land produced good maize, much more than the people required; there were also squashes, beans, and other vegetables in season. They made oil from the seeds of the sunflower, which the girls reduced to meal and then placed in boiling water, which caused the oil to float; it was then skimmed



Fig. 29210—Full size.

with wooden spoons. The mush was afterward made into cakes and formed a very palatable food.

“Daillon said that the life of the Neutrals was ‘not less indecent’ than that of the Hurons, and that their customs and manners were very much the same. Like those of the Hurons, the lodges of the Neutrals were formed like arbors or bowers, covered with the bark of trees, 25 to 30 fathoms long and 6 to 8 in breadth,



Fig. 29217—Full size.

and had a passage running through the middle, 10 or 12 ft. wide, from one end to the other. Along the sides was a kind of shelf, 4 ft. from the ground, whereon the occupants lay in summer to avoid the fleas. In winter they lay on mats on the ground near the fire. Such a lodge contained about twelve fires and twenty-four firesides. Like the Hurons they removed their villages every five, ten, fifteen or twenty years, from one to three or more leagues, when the land became ex-

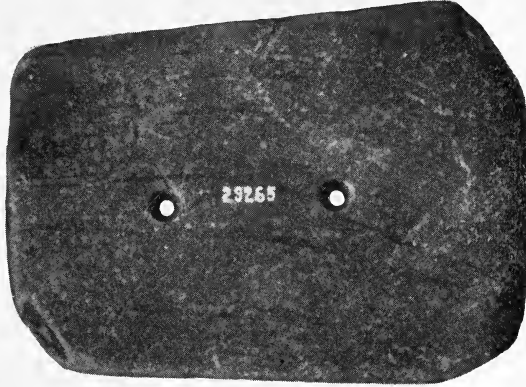


Fig. 29265—Two-thirds diameter.

hausted by cultivation; for, as they did not make use of manure to any great degree, they had to clear more new and fertile land elsewhere. Their garments were made from the skins of various wild beasts obtained by the chase or through trade with the Algonkin, Nipissing, and other hunting tribes, for maize, meal, wampum, and fishing tackle.

"The Neutrals were visited in 1640-41 by Fathers Brebeuf and Chaumonot. The tribe was then engaged in vigorous war against the western tribes, especially the Mascouteons. These two missionaries visited eighteen villages or towns,

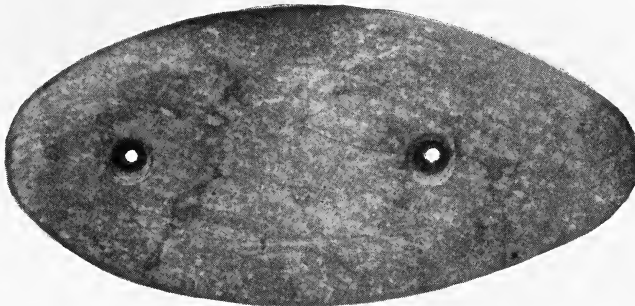


Fig. 29266—Two-thirds diameter.

stopping in ten of them, and expounding their own religious faith whenever they could assemble an audience. In these ten settlements they estimated about 500 fires and 3,000 persons.

"Immediately after the political destruction of the Hurons by the Iroquois the latter again attacked the Neutrals. The entire conquest of the Neutrals in 1650-51 was the result of this war, and some remnants of the Neutral tribes were incorporated chiefly with the Seneca villages in New York."—Handbook of American Indians.

Ground Stone—Problematical form.

Moorehead, in his "Stone Age," gives the following excellent classification of these various forms, viz:—

Ground Stone.

I. Problematical forms.

1. Laminæ (i.e., flat "spuds," "gorgets," and pendants).

Types:—

- (A) Spade-shaped.
- (B) Ovate.
 - (a) Sides concave (not common).
 - (b) Sides straight.
 - (c) Sides convex.
- (C) Leaf-shaped.
- (D) Spear-shaped.
- (E) Rectangular.
 - (a) Sides concave.
 - (b) Sides straight.
 - (c) Sides convex.
- (F) Shield-shaped.
- (G) Pendants.
 - (a) Celt-shaped.
 - (b) Rectangular.
 - (c) Oval or circular.

2. Resemblances to known forms.

- (A) Animal-shaped stones.
- (B) Boat-shaped stones.
- (C) Bar-shaped stones.
 - (a) Longer, resembling true "bars."
 - (b) Shorter, "ridged" or "expanded gorgets."
- (D) Spool-shaped stones.
- (E) Pick-shaped stones.
- (F) Plummets-shaped stones.
- (G) Geometrical forms.
 - (a) Spheres.
 - (b) Hemispheres.
 - (c) Crescents.
 - (d) Cones.

3. Perforated stones with wings.

- (A) Wings with constant rate of change of width.
 - (a) Wings expanding from perforation.
 - (b) Wings with sides parallel.
 - (c) Wings contracting from perforation.
- (B) Wings with varying rate of change of width.

- II. Tubes and tube-shaped stones.
- III. Beads.
- IV. Pitted stones other than hammerstones.

The same author makes the following comments:

"If one will reflect on the beginnings of human culture, it may seem to one that the earliest man picked up a flat bit of bright stone without irregular edges—perhaps it was oval—and drilled a little hole in the top, and wore it about his neck as an ornament. It is not to be supposed that man began with the specialized forms, or a ridged ornament, which must have been of later development. Whether by later, one means a few generations or a thousand years, is immaterial, for, as we have observed in other places in this book, some tribes progressed rapidly, while others did not. Among the latter, the period of development in ornamental stones would be practically nil, for there are no problematical forms among such Indians as the Seris, whom McGee found in the stone age as late as 1901.

"Now, while such Indians as the Seris have not progressed, we must not imagine that the rate of progress among other tribes was always very low. It may have been rapid, or it may have been retarded; no man can affirm with reference to this. But it is to be supposed that the progress was considerable, for the Indian is superior to most other tribes of barbarians.

"It is not necessary to point out that the Indian brain is finer than the Australian or African brain. The Indian is bright, he is alert, he is quick to avail himself of natural advantages. I have always been of the opinion that, had the Indian discovered the properties of iron, and constructed more permanent dwellings, he would have developed a high culture peculiarly his own, on this continent.

"We may imagine that the first aborigine to discover the possibilities of the stone ornament selected an unusually soft clay-stone, punched a hole through it with a thorn, and the material being very soft, the rim between the perforation and the upper part gave way and the stone was lost. Meantime, other natives, seeing and admiring this new ornament, followed his example. Presently, it was ascertained that slate and sandstone, while harder to drill, retained their shape and were more serviceable than softer clay-stones. Somebody discovered that it was well to make two perforations in the oval stone. Again, that by grinding the edge of the stone one could change the form, and thus the objects came into use. A stone of near the desired shape was worked accordingly, and flat discs remained as more or less circular or rectangular ornaments. Thus, slate and shale, rectangular in the natural state, were made into rectangular or square ornaments and tablets."

"Stone Age" has a chart showing 221 forms in this class. The Murray collection has many excellent specimens, some of which we reproduce. They vary very much in outline, but in all we have evidence of the artistic taste of the sculptor. Their work compares favorably with that done in stone by their more civilized cousins in Mexico and South America. The majority of these articles were surface finds; many of them picked up by the farmer while tilling his soil.

Our knowledge of the uses a large number of these articles were put to is very meager, and we are often led to say that if our self-sacrificing ancestry had devoted a little more time to the history of their home life we would have gained greatly thereby; but time and investigation may yet restore to us a knowledge of the uses of many of these artifacts.

BIRD AMULETS.

This collection* contained eight perfect and two fragmentary specimens of what are called "Bird Amulets," only one of which is not slate. It is of quartzite, and not of such graceful proportions as are those made of argillaceous stone. No doubt this is on account of the refractory nature of the material. Such objects



Fig. 29176—Full size.

are frequently referred to as *Totems*, but we have no knowledge of clans bearing names to correspond with the various shapes we find, and it does not appear to have been the custom to represent totems in this manner.



Fig. 29177—Two-thirds diameter.

We have in the Museum two specimens of smoking pipes of turtle form and two more objects of a similar shape, which appear to have been meant for purely ornamental purposes. The latter two may have been intended for some totemic use, but it is just as likely that they were so made simply because the shape of



Fig. 29178—Two-thirds diameter.

the unworked stone suggested the form in question. (See No. 26765, Arch. Report, p. 7, 1904.) The name by which these are known, "Bird Amulets," was probably given because they are suggestive of bird-forms, and we do not know

* Murray collection.

enough about them to suggest any other designation; but it is not at all improbable that as amulets or charms they had some connection with the capture of water-fowl. In addition to this, the theories about them are certainly fanciful—from being worn by married women, conquerors, and war parties, to placing on the *bow* of a canoe during a fishing expedition. But all alike are hypothetical, and we have yet to secure more positive information before we can ascribe to them



Fig. 29179—Full size.

a definite place among the archaeological remains of our “Red Man.” Whatever their uses may have been, the drilling of the other stone in this set is most uniformly done, and in accordance with a recognized plan. Drilling in stone was one of the arts of prehistoric man during the Neolithic period, continued into the Bronze Age, and thence down to historic times. Scores of examples can be given from both Europe and America in which the drilling shown is at once delicate



Fig. 29180—Full size.

and difficult. In prehistoric Europe man drilled a hole in his axe and put a handle in it. In America he grooved the head of it and handled it by a withe.

There are some seventy-five of these Bird Stones in the Museum, varying from one inch to nine and three-quarter inches in length. No two are exactly alike in general outline or in length; some eyeless, some without tails, others with a pointed beak, and others rounded, others again with the bird's head at both ends. Most of them are perforated at the base, but many are not. Taken all together,



Fig. 29181—Full size.

they form a most unique collection. Their number, as well as their widespread distribution, would lead us to believe that they were used either for some important ceremonial, or else for utilitarian purposes. Be their use what it may, their elegant outline places the sculptors far above the class of people we are accustomed to call "barbarous."

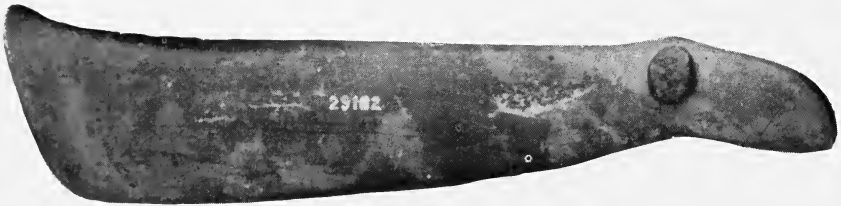


Fig. 29182—Two-thirds diameter.

Only four of the eight perfect bird amulets from Kent and Elgin counties, forming part of the Murray collection, have the protuberant eyes, which are characteristic of many such specimens, and the one of quartzite has not the diagonal holes at the ends of the base which are almost always present in finished slate objects of this kind. These specimens are all made of banded slate, and like most of their class are works of art. No two of them are alike.

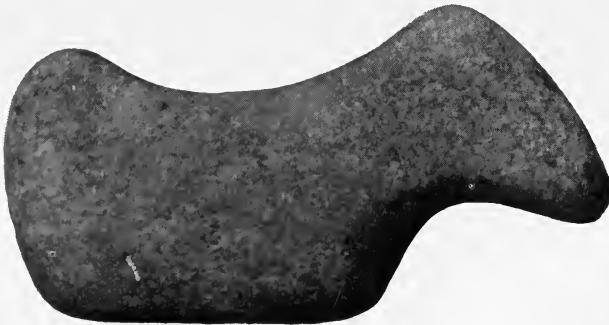


Fig. 29183—Two-thirds diameter.

Fig. 29183 may be classed with the Bird Amulets. It is of quartzite, and beautifully carved. The outlines are all proportionate. The lack of polish and absence of holes at the lower angles might lead one to suggest that it was only partly finished.



Fig. 29134—Full size.

These problematical stones, known by various names—Gorgetts, Banner Stones, Shuttles—evinced great care in their manufacture, and prove that a skilled hand was employed. Fig. 29134 is somewhat unique in its appearance; it is made of beautifully veined slate, with a double crescent; the holes were drilled from both sides. In no place does it show any sign of wear, its well-marked edges are sharp just as they left the maker's hand. It is the only specimen of the kind in the Museum. It has been suggested that stones of this kind were used for the purpose of winding their fishing lines thereon.



Fig. 29188—Full size.

Fig. 29188 is a splendid specimen of this class. It differs from all the others in that there is no ridge from top to bottom, but in place of the same there is a square protuberance on both sides, rough on the surface, looking as if a suitable piece of slate had been taken. The indentations at either end are quite deep, that at the top being one inch, the lower one three-quarters of an inch. The drilled

hole through the centre extends to the points; the top of the hole shows signs of wear and has the appearance of having been used for stretching thongs or strings. These markings can be seen in the upper part of the cut.

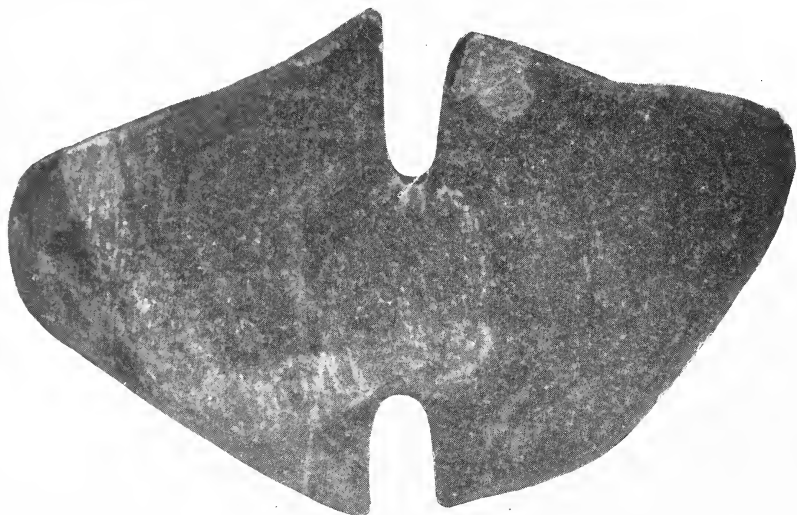


Fig. 29190—Full size.

Fig. 29190 though very similar to the previous one (Fig. 29188) is much thinner. On both sides the elevation over the drilled hole is very slight and has the appearance of having been rubbed off. This stone shows considerable signs of wear, and without doubt has been used for rubbing down cords or deerhide thongs for use on bows and snow-shoes. These marks, which can be plainly seen in the plate, do not extend into the drilled hole. The rubbing appears to have been done by inserting cord into the notches.



Fig. 29192—Full size.

Fig. 29192 is a most beautiful specimen of green lined slate. It is much thicker and heavier than most of these specimens. The hole through it is slightly

over one-quarter of an inch in diameter, and is not as perfectly bored as in most of such pieces. On the front is an elevated ridge with thirteen marks thereon, probably to represent the thirteen lunar months in the Indian year. These markings are very regular, and are not so deep at the extremities of the ridge as in the centre.

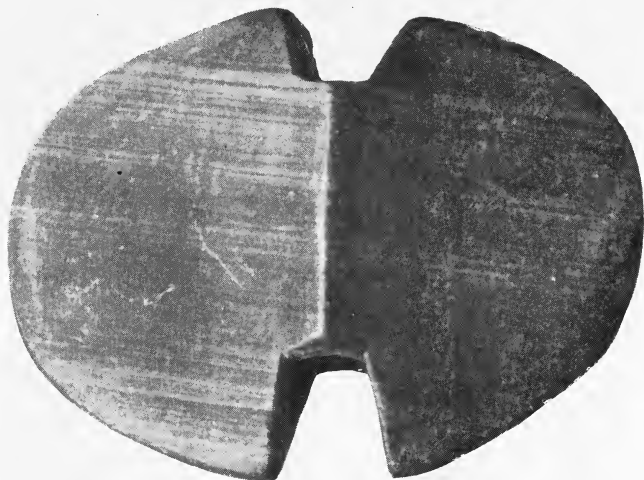


Fig. 29191—Full size.

Fig. 29191 differs from some of the others in the fact that the ridge in the centre is of an equal size on both sides. The indentations at top and bottom are slightly to one side on the reverse of that shown in the cut, the corners are square, the sides curving slightly inward to the top of the hole. The drilling extends some distance along the sides, indicating that the drilling had been done first, then the cuttings at top and bottom were made. The two wings are not perfectly symmetrical, as can be seen in the cut.



Fig. 29197—Full size.

Fig. 29197. This butterfly stone is made after the pattern of many others. It is well made, and on the reverse side from that appearing in the cut the elevated ridge extending down the centre is not nearly so prominent and has the ap-

pearance of having been worn. Probably in some of these a polished piece of wood was passed through the hole, and by this means fastened to clothing, or around the neck, or as a pendant to a string of beads.



Fig. 29193—Full size.

Fig. 29193 closely resembles the previous one (Fig. 29197). The reverse side of this is almost straight across; the elevation is very slight, and where it terminates at the lower end it is almost flat. The hole is drilled straight through and is uniform in size.



Fig. 29196—Full size.

Fig. 29196 is the only stone of this pattern in the Museum. In outline it is perfect, both sides being similar. There are no marks on it whereby one could even guess at the use to which it had been put. Stones such as these are not found south of the Ohio River; there are considerable numbers throughout the lake region of Ontario.

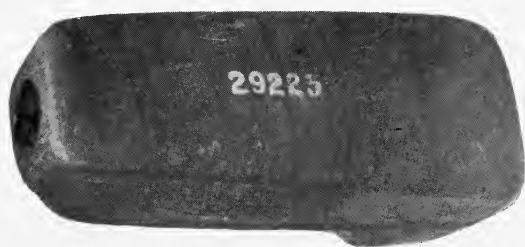


Fig. 29223—Full size.

Fig. 29223 might be classed with the tubes. It is well bored, with a groove on both sides, the groove widening slightly from the larger end to the smaller. The hole extending from end to end is the reverse of the grooves and becomes larger toward the smaller end. Its use would be very hard to suggest; there is no similar piece in the Museum. It may possibly have been used as a stretcher for lines, the concave part at top and bottom for rubbing the same, as something similar to this is used by the Eskimo for this purpose.



Fig. 29189—Full size.

Fig. 29189 is a unique specimen in this class. The elevated ridges on both sides are well marked; the hole through the centre is uniform in size and perfectly drilled. The holes at the lower part have been sunk from both sides, and while one would think that they were placed there for the purpose of suspension, they are absolutely unworn.

CEREMONIAL WEAPONS.

In the collection of fairly good specimens procured from Mr. William Murray, of Elgin County, were many which, for want of a better name, we must call "Ceremonial" objects, on the supposition that they were used only in, or at, feasts, dances, and parades, or as personal decorations at any time, but having some symbolic significance in all probability. One of the most characteristic of

these is shown by figure 29187, which, from the situation of the holes, we may guess was worn as a pendant. It is handsomely veined. It is six inches and a quarter long and three inches wide at the lower end. All the boring has been



Fig. 29187—Three-quarters diameter.

done from the side shown, apparently with drills of two different sizes. The portion between the side circular curves, which is perforated with a hole nearly a quarter of an inch in diameter, is considerably thicker than the rest of the object. As a tool it possessed no value whatever.



Fig. 29199—Full size.

Fig. 29199 is a view of what by tacit consent has been commonly called a "Banner-stone." The hole is large enough to contain a fairly substantial shaft, but the stone head as figured is quite too small to have been used to hold the handle of a weapon. It is more likely that it was used for some ceremonial purpose in connection with some of the so-called religious rites.

Fig. 29211. This pendant-like specimen would appear to have been used much as we suppose these tools were that are figured 29258 to 29262.



Fig. 29211—Full size.

The upper edge of this one looks as if it had been employed to rub against something else, and the projections are suggestive of guides to keep the tool in place when in use by being pushed.



Fig. 29207—Full size.

Fig. 29207. The symmetry and gracefulness of this figure are noticeable. It is made from a piece of very thin Huronian slate scarcely more than one-eighth of an inch in thickness. Such stones as these with two holes were probably fixed to some part of the person or to some article of ceremony. The holes, as in this case, are usually countersunk, and most of the objects such as this are made of slate. They were widely distributed.

Fig. 29212. This pendant-like specimen of slate shows that a piece has been broken off at what is now the longer angle at the wide end, and that a little rubbing has been done to make the place of fracture smooth. The boring has all been



Fig. 29212—Full size.

done from the side shown in the cut, the size of the aperture on the other side being very much smaller. In this case, as in many others, the hole is not rubbed, nor has it the appearance of having been used as a means of hanging around the neck.



Fig. 29218—Full size.

Fig. 29218. The figure here seen depicts a novelty to us. The Murray collection contained two, one of which, however, was much damaged. The one photographed is perfect; the imperfect specimen was continued in use, whatever that use may have been, for it is noticeable that after a fracture had taken place at one end, in line with the venation, the owner was at some pains to polish down the rougher parts of the break. A hole at each end is bored obliquely, as in the bird and bar amulets.



Fig. 29221—Full size.

Fig. 29221. This photo-engraving represents an example of what is known as a "degraded" implement, i.e., one that has been produced from a perfect im-

plement of some kind and which was latterly used for a very different purpose. Banner-stones in perfect condition are symmetrical—this is only the half of one which has become broken where the usual central hole existed. The fractured end still shows part of the original hole which, however, has had the fractured portions rubbed down until now they are quite smooth. From the hollow that remains as part of the original hole, another hole has been bored at right angles to meet the one shown in the cut. It may probably have been used as a pendant on a bead necklace.

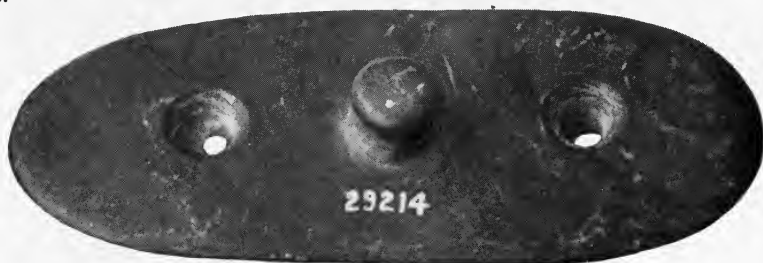


Fig. 29214—Full size.

Fig. 29214 represents a piece in the Murray collection differing from anything else in the Museum. The raised button in the centre stands out nearly half an inch; the holes at either side are much larger on the part figured; the reverse side is slightly convex. It may have been used for a button, or as an ornament at festive gatherings.



Fig. 29241—Half-diameter.



Fig. 29245—Full size.



Fig. 29246—Full size.

Figures 29241, 29245, 29246, 29247. The crude animal forms illustrated have a fish-like appearance, with the exception of fig. 29245. They are all bored, seemingly for suspension or for being fastened to some support. The exception in

question is notched at one end, and this would serve a similar purpose. In fig. 29241 the hole at each side near the head has a separate termination on the base, but those near the tail end, as we may call it, terminate on the base in a single hole. It should be mentioned that the rear hole has first been bored clear through from side to side, and that connection with the base was effected by means of one

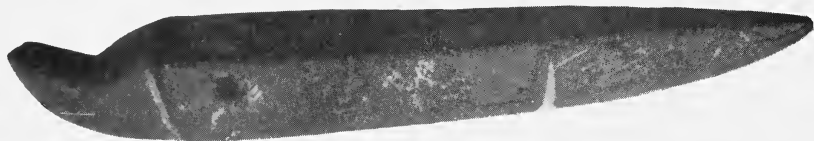


Fig. 29247—Full size.

perforation in the middle. If fig. 29246 be an animal form, as its resemblance to fig. 29241 would suggest, what was meant for the eye-hole would also serve for suspension, as it is bored clean through. In fig. 29247 the boring near the head has been done as in fig. 29241 in the corresponding situation. The strong probability is that all of them except fig. 29241 were used as pendants.

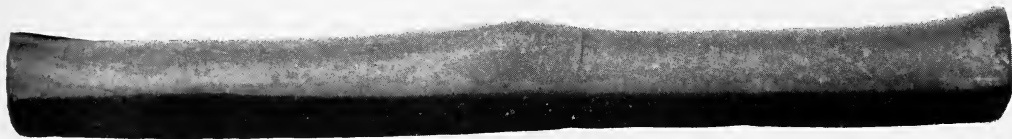


Fig. 29243—Two-thirds diameter.

Fig. 29243. The specimen here figured, known as a "Bar Amulet," is eight and three-fourth inches in length. We have several specimens in the Museum of similar form, but all smaller than this. Like the "Bird Amulets" these are invariably perforated diagonally through the base at each end. The elevation on its rounded side is exactly in the middle. From its general outline one would surmise that it had been put to some useful purpose.



Fig. 29236—Full size.

Figures 29236, 29216. These figures represent a class of ancient Indian work of which absolutely nothing is known as to its purpose. The hole, usually an oval one, passes transversely through what is the upright portion of the cuts. In the case of figure 29216 it is quadrangular. There are several specimens in the Museum, from various parts of the Province, and their purpose in aboriginal economy has always been enigmatical. From no Indian can any knowledge of their use be ob-

tained. My own guess is that they were in some way employed to twist cords or strings, but such guesses are worthless. Perhaps the origin of this hazy supposition arose in connection with the finding of two breast bones of a large fowl in a



Fig. 29216—Full size.



Fig. 29258—Full size.



Fig. 29260—Full size.

grave near Boston Creek, not far from Hagersville, when two Mississauga women were present, one of whom volunteered the information (a very unusual thing) that the breast bones had been used in such a way, and then proceeded to state that formerly a stone implement was similarly used. From her description, I got the impression that she meant a tool of this kind.



Fig. 29261—Full size.



Fig. 29262—Full size.

Figures 29258, 29260, 29261, 29262. These figures—all of slate—seem to represent a kind of scraper, bearing the same relation to the flint tool of this name, that the "Woman's Knife," of the same kind of stone, bears to the flint one. On the concave edges they are all brought to a comparatively thin edge as if used for aid in dressing skins stretched over a round, or rounded, wooden pole.



Fig. 29237—Full size.

Figures 29237 and 29238. In the process of weaving, it is necessary to press the cross threads of the woof tightly against each other. In a machine loom this is



Fig. 29238—Full size.

done with comparative ease, but when the loom is little more than a plain frame, the work of packing the threads closely is somewhat tedious, and has to be done by means of some such tools as are pictured in the cut. This, however, is merely a guess at the use of such "toothed" specimens, and they may have been employed in a very different manner. The hole in this specimen is bored from both sides, a large drill being used on one side, and a much smaller one on the reverse. The teeth come down to a sharp point and are uniform in length, but not so in width; its composition is striped slate, and somewhat peculiar at that, as can be seen in fig. 29238.



Fig. 29278—Full size.

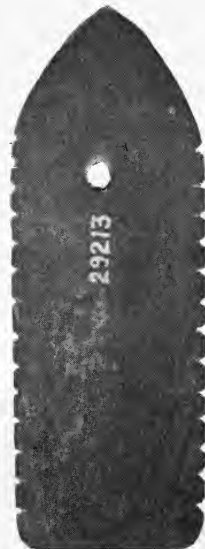


Fig. 29213—Full size.

Figures 29278, 29213. The crenated edged pendant shown by fig. 29278 is

unlike anything else in pendant form in our cases; it is likely the notches were made more for ornament than for use, and the same may be said of fig. 29213. Both of these articles were worn as ornaments. The hole shows that the string carrying it has worn both sides alike, and the same in both stones. The serated edges of fig. 29213 has thirteen marks on one side and fourteen on the other; fig. 29278 has twenty-five marks fairly regularly cut in it.



Fig. 29263—Half diameter.

Fig 29263. The adze represented by the cut is the only one we have, made of such material—porphyritic argillite, which was evidently chosen for the purpose because, as a pebble, its shape suggested this kind of tool. The side shown in the engraving is concave and, except in a few places, it is very smoothly finished. There is no appearance of any handle ever having been used with it, and its sharp convexity near the upper end on the other side suggests that in all probability the tool was held directly in the workman's hand. It may have been used in removing surface wood already charred, in the making of dishes, or in hollowing canoes.

STONE PIPES.



Fig. 29250—Full size.

Fig. 29250. The bowl is much larger than is usual in stone pipes, and would hold a considerable quantity of tobacco.



Fig. 29251—Full size.

Fig. 29251. The bowl of this pipe is also larger than usual, and though broken, the outline is well shown. The circular base is flattened slightly at the front part and notched around the base. The stem is square, measuring five-eighths of an inch, and is slightly larger where it joins the bowl.



Fig. 29252—Full size.

Fig. 29252. The head is neatly carved, somewhat "simian" in appearance, the nose flattened, and ears somewhat crude, but well brought out. The stem is round and the base of the pipe comes to a point in the front.



Fig. 29253—Full size.

Fig. 29253. The bowl and general outline has a decidedly modern appearance, though in other respects the workmanship is that of the Stone Age.



Fig. 29254—Full size.

Fig. 29254. The stem is short and thick; the hole is at the upper part; the base is flat, rounded over the top, and while an elegant smoking pipe, it is not a thing of beauty.



Fig. 29256—Full size.

Fig. 29256 represents a quadrangular pipe-head. On each of the sides an attempt has been made to carve a human face. All of them are crude. A unique feature of this pipe is the position of the suspension hole, which is bored through the eye of the imperfect face carved on the back of the pipe near the stem-hole, diagonally, and has its other extremity on a level with the tip of the nose on that side. On three sides there is clearly seen an attempt to bring out the supra-orbital ridges, and on two of the faces are lines extending downwards from nose and mouth,—lines that are not usually regarded by any Indian artist. This pipe-head is of sandstone, and in many respects is rudely made. Probably age has destroyed much of its original appearance.



Fig. 29249—Half diameter.

Fig. 29249. Close as is the resemblance in outline between this specimen

and that of fig. 29263, there could not possibly have been similarity in their uses. There can be no doubt that fig. 29249 was intended for a smoking pipe, being in fact, a prototype of what, after the appearance of Europeans, became the much coveted tomahawk iron-pipe. The stem-hole, five-eighths of an inch in diameter, bored in line between the two crosses in the diagram, was large enough to receive a very serviceable handle of hickory, or other tough wood, provided with a hole bored through it lengthwise for a pipe-stem. This hole was, as a matter of course, connected with another through the bottom of the bowl for smoking purposes, when the owner wished to rest and be regaled, after exhausting himself in performing some bloodthirsty task; or it may be (if the owner of it was a woman), after she had done some arduous work in the preparation of kindling wood on the camp ground. It is made of Huronian slate, very well marked, the lines running at a slight angle from end to end.

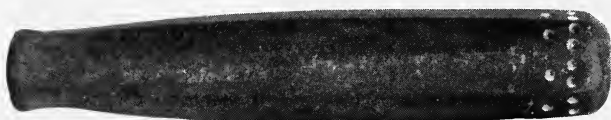


Fig. 29229—Two-thirds diameter.

Fig. 29229 is peculiar in being octagonal, as well as in the style of its ornamentation around the larger end—a series of three shallow-pitted holes on each of the faces. Such tubes *may* have been used as smoking pipes, as is claimed by some United States archæologists, and this one is much more suggestive of that use than many others, being provided with what is apparently a mouthpiece. The hole in the tube is much larger at one end than at the other. The larger hole extends about three-quarters of the length of the tube, where the smaller hole meets it most perfectly. Huronian slate was comparatively seldom used in the production of smoking pipes, or of tubes of any kind, in Ontario. One is tempted to attribute white influence in the making of this tube, no matter for what use it was intended.



Fig. 29222—Full size.

Fig. 29222 is the view of what is a puzzle. The hole goes clean through, so that the article is really a tube. But what is it for? It is well made and is fairly symmetrical. The upturned end curving backward to the body of the tube is slightly grooved at both sides, with the general appearance of having been used, the stone having a rubbed appearance, and probably may have been used in the process of weaving.



Fig. 29204—Full size.

Fig. 29204. This shows the side and one end of what looks like a small double edged axe. The hole is oval, and large enough to take in a good sized handle; but it is more than doubtful whether the object was ever intended for use as a cutting instrument. The hole is poorly made and is probably the result of making two borings through the stone, and afterwards removing the partition between the two perforations. The hole is slightly larger at one end, and from its appearance it has been used for rubbing down thongs or cords.



Fig. 29203—Full size.

Fig. 29203. We have here the side and end views of a specimen regarding which nothing is known. The hole goes from side to side, and is entered by two other smaller holes near each end from the bottom—as it stands in the cut. A slight fracture occurred at one of its upper corners, as can be seen in the cut, but was well polished. Most likely it was worn as a pendant.



Fig. 29224—Full size.

Fig. 29225—Full size.

Figures 29224, 29225, 29226, 29231, 29232. We also illustrate here a number of tubes taken from the Murray collection, and mostly found in Kent

County. These tubes are well made, all being composed of banded slate, with uniform drilling. They vary in length from one and one-half inches to seven inches. They are all, like most of this class, smaller at one end than the other, and in one or two instances they would appear to have been used as pipes, but the strong

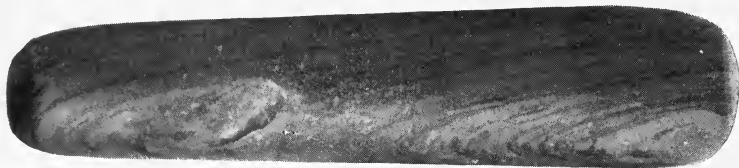


Fig. 29226—Full size.



Fig. 29231—Half diameter.

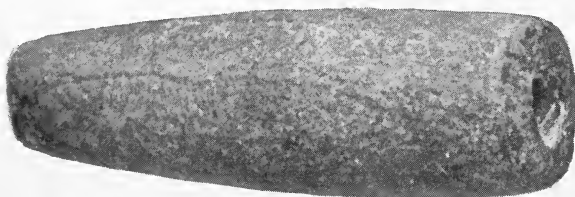


Fig. 29232—Half diameter.

probabilities are that most of them were used by their medicine men for the purpose of cupping or drawing the evil spirits out of the patient's body. Such a practice exists even at the present time amongst the Western and South-western tribes. They use bone and wooden tubes much resembling the stone found in this Province.

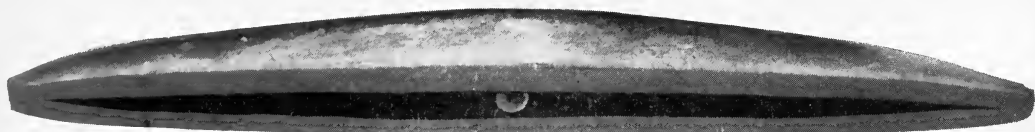


Fig. 29242—Two-thirds diameter.

Fig. 29242 shows what in our ignorance we (Prov. Museum) call a "canoe stone." It is hollowed almost its whole length and is perforated in the centre. On the supposition that the aboriginal women wove after the manner of the white people, specimens of this kind have been called *shuttles*. As shown by the illustration, one edge is quite straight, while the other is rounded both ways. Specimens of this kind are by no means common, and this is the largest one in our collection.

STONE AXES.

Out of all the axes recently added, fewer than ten are transversely grooved, and some are only slightly so; others are most deeply cut into on the edges. By means of this transverse groove it is comparatively easy to distinguish a Canadian from an American axe. It may be objected that when such tools were made no such distinction of territory existed. This is quite true, but there were other distinctions corresponding to it, which set the fashion in the production of various tools and weapons besides axes. Perhaps language was mainly responsible, but association counted for much, and associations, as a matter of course, would depend mainly on the ability to converse with one another. In Canada our dealings have chiefly been with two stocks of Indians, viz., the Algonquins and the Huron-Iroquois, whose languages are totally distinct, and while there were to the south of us representatives of both those stocks, there existed topographical differences as well as what may be called national distinctions, sufficiently powerful to regulate even matters of this kind. These conditions, in connection with the natural conservatism of primitive peoples, would account for such differences when a fashion had once been adopted.

Even within the comparatively limited area of this Province, with its 220,000 square miles (not including the lakes), we can in some instances, recognize a marked difference between, e.g., the patterns of stone gouges from the eastern, western and middle sections, and between even the shapes of arrows found in different localities at wide distances apart. More than once it has been mooted in these reports that in all probability there have been Indians here preceding any known to history. This thought arose from the fact that in graves we find no material of what we call the "Ceremonial" kind, and that on the other hand all specimens of this sort are picked up from the surface of newly-ploughed land.

Fig. 28796. Among nearly three hundred axes, or celt-like specimens from the neighborhood of Clachan, are a good many quite noticeable on account of the precision with which they have been made, indicating not only a good mechanical eye but skill in handling the material. The one here illustrated, although nearly devoid of polish, is almost perfectly symmetrical, and, with a good handle, must have proved an effective instrument even for chopping trees. Minus the handle-hole it might have served as a model for the modern axe in common use.

Fig. 28810. In at least one respect, this is an exception to every other stone axe I have even seen. As a rule, tools of this kind are more or less convex on all sides—seldom even flat, but this one is slightly hollow on the two sides, as may be seen by the cross-section diagram, which represents the curve of a section near the arrow. The stone is a fine-grained grey granite, a little more than six inches long, nearly three inches wide at the lip, and averages an inch and a half in thickness.

Fig. 28814. In shape this axe may be mentioned as the "antipodes" of fig. 28810, being of unusual convexity in proportion to its breadth. The pole shows that it was used as a hammer. A chip knocked out near the middle of the lip has been smoothed down, apparently with a half-round or a rat-tailed file. The stone is of granite.

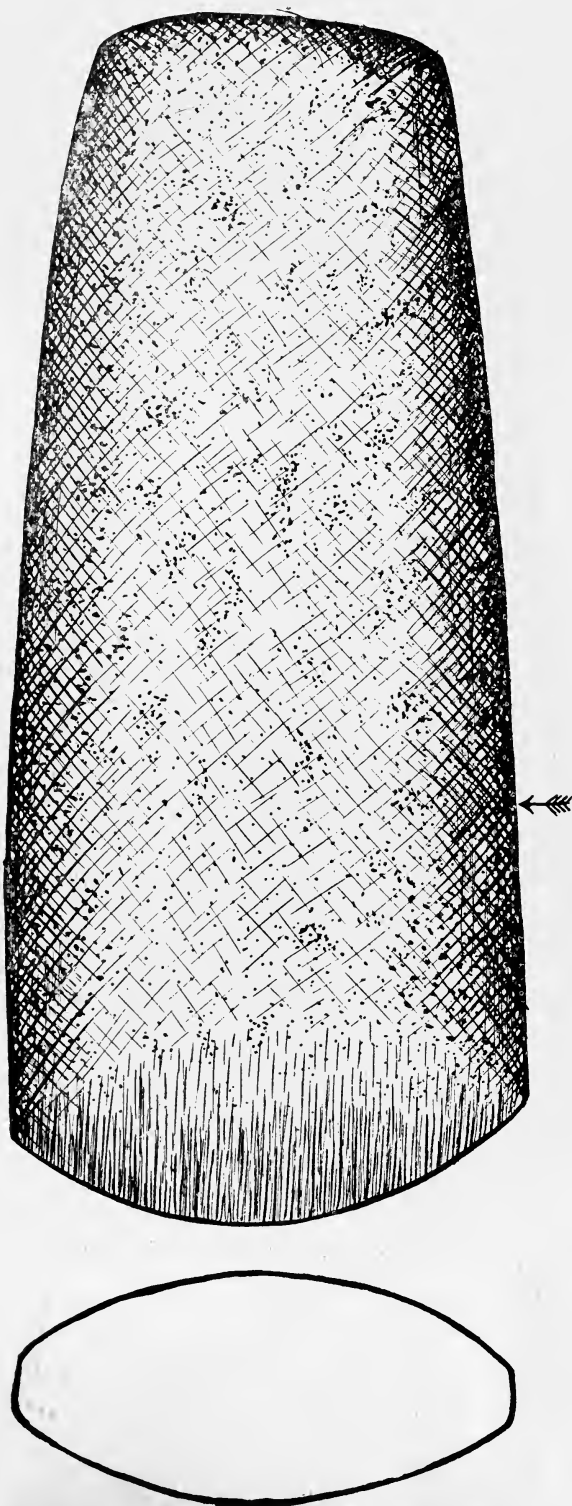
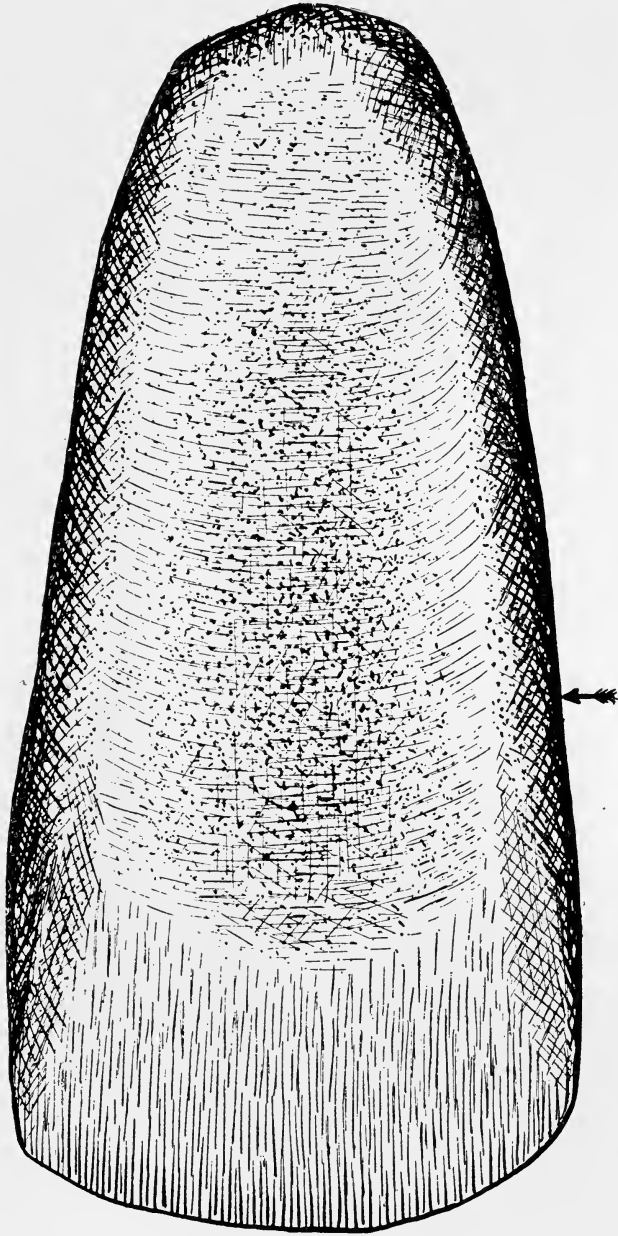


Fig. 28796—Full size.



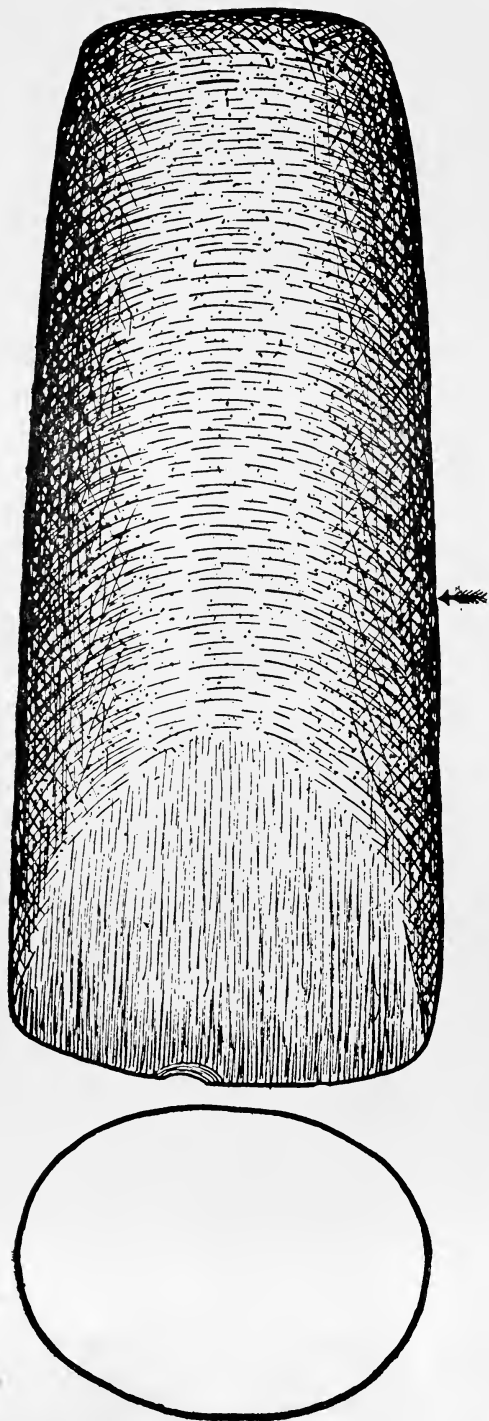


Fig. 28814—Full size.

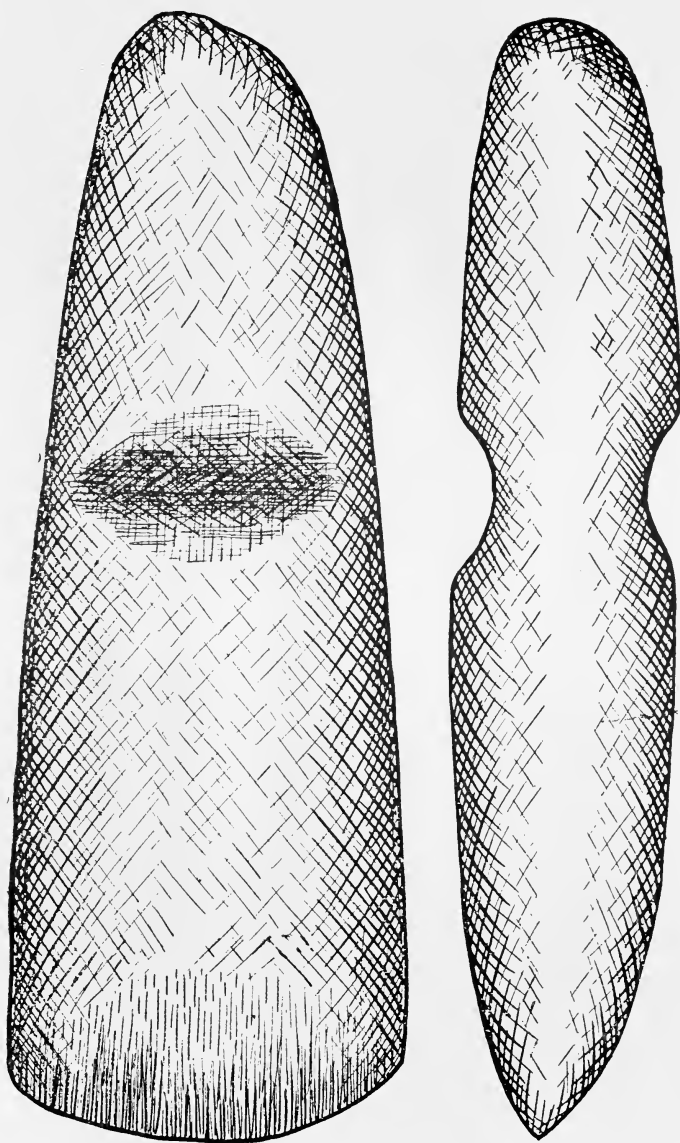


Fig. 28833.—Full size.

Fig. 28833 is the only example we have of side-grooving. The handle had evidently been attached as a forked or split piece of wood by being lashed to the head by means of a diagonal arrangement of fibres passing over one edge and under another at the opposite side. It bears signs of much wear on all the angles of the notches but still carries a good cutting edge. It has the appearance of having been brought into shape wholly, or largely, by rubbing, as it bears no evidence of chipping. It is a greenish grey in color, and looks like a piece of highly refractory material, not quite dissimilar to jadeite but less fine in texture.

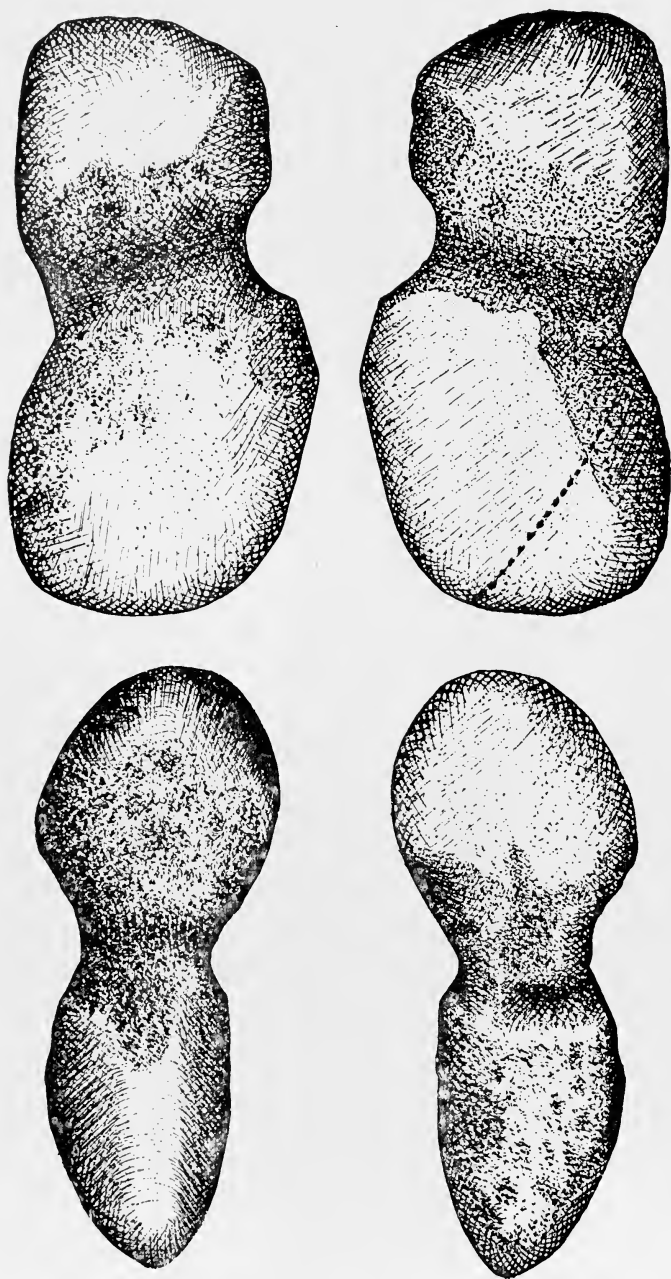


Fig. 28847—Half diameter.

Fig. 28847 is not by any means "a thing of beauty," but to one who likes to learn how things aboriginal were made it is "a joy forever." As in many other instances where stone tools are concerned, the ancient worker selected a piece of ma-

terial best adapted to the shape he had in his mind, and in this somewhat large and unshapely pebble he probably saw a shape indicated by the dotted line on fig. 28847a.

The edges of the pebble were much more symmetrically formed than the sides of it, yet the old mechanic was either very hard up for "stuff," or had extremely poor judgment when he chose this water-worn stone. But stones of any kind are not plentiful in Kent County. In any event the work done on it is totally different from other work of the kind much more frequently found. To me, too, it looks much older. Comparatively few grooved axes are found in On-

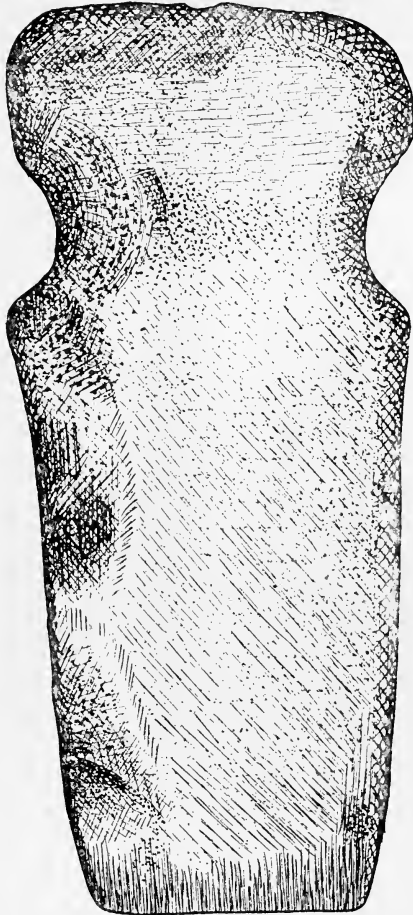


Fig. 28845—Half diameter.

tario (in Canada it may be said), and it frequently happens that the grooving is not all like that of more southern peoples; the work done in Ontario being somewhat shallow and not seldom affecting the edges only of such specimens as seen in fig. 28845, which is six and a half inches long, and proportionately very thin—little more than inch at the pole.

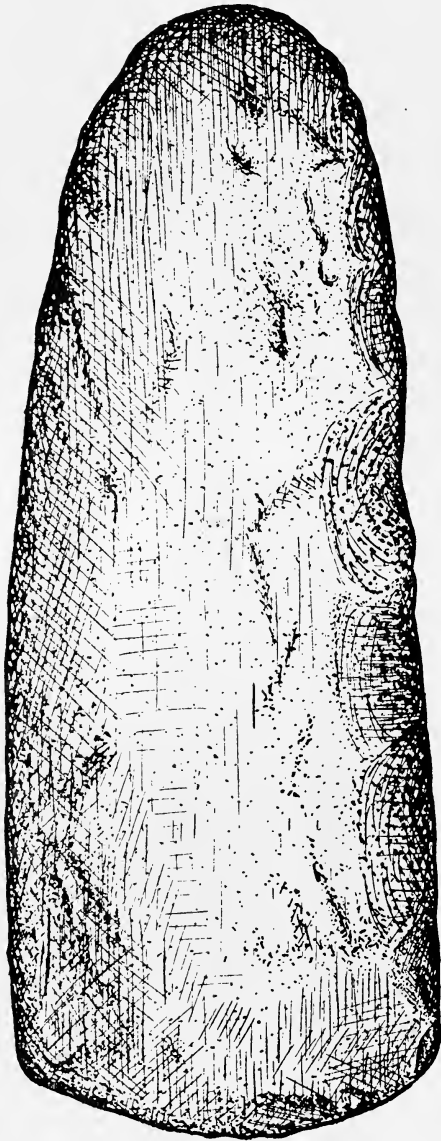


Fig. 28860—Full size.

Figures 28860 and 28864 are representations of unfinished axes, or of axes made hurriedly just when required. They might be called for this reason *emergency axes* as they seem to have been most probably used only temporarily. The main thing was to procure a cutting edge. The reverse is roughly straight, while the side shown in the engraving has the cutting edge worked from both sides.

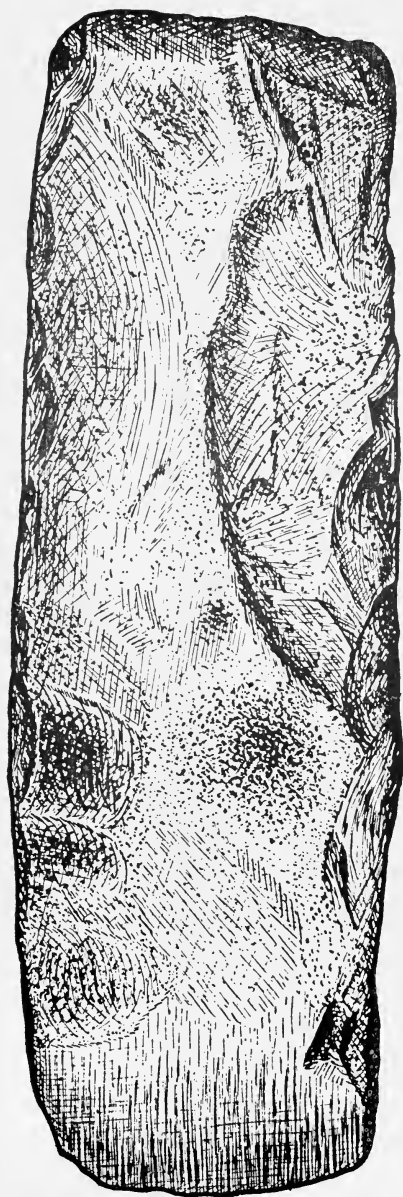


Fig. 28864—Full size.

GOUGE FORMS.

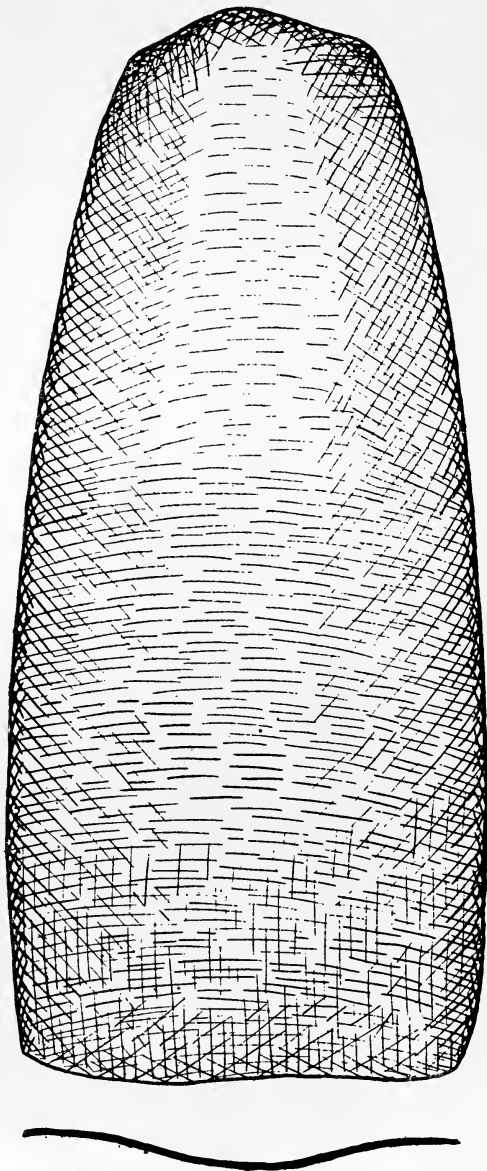


Fig. 28821—Full size.

Fig. 28821 is one of the simplest gouge forms we have. The lip is only slightly hollowed (not more than an eighth of an inch), and seems to have been formed by a modification from an axe-form.

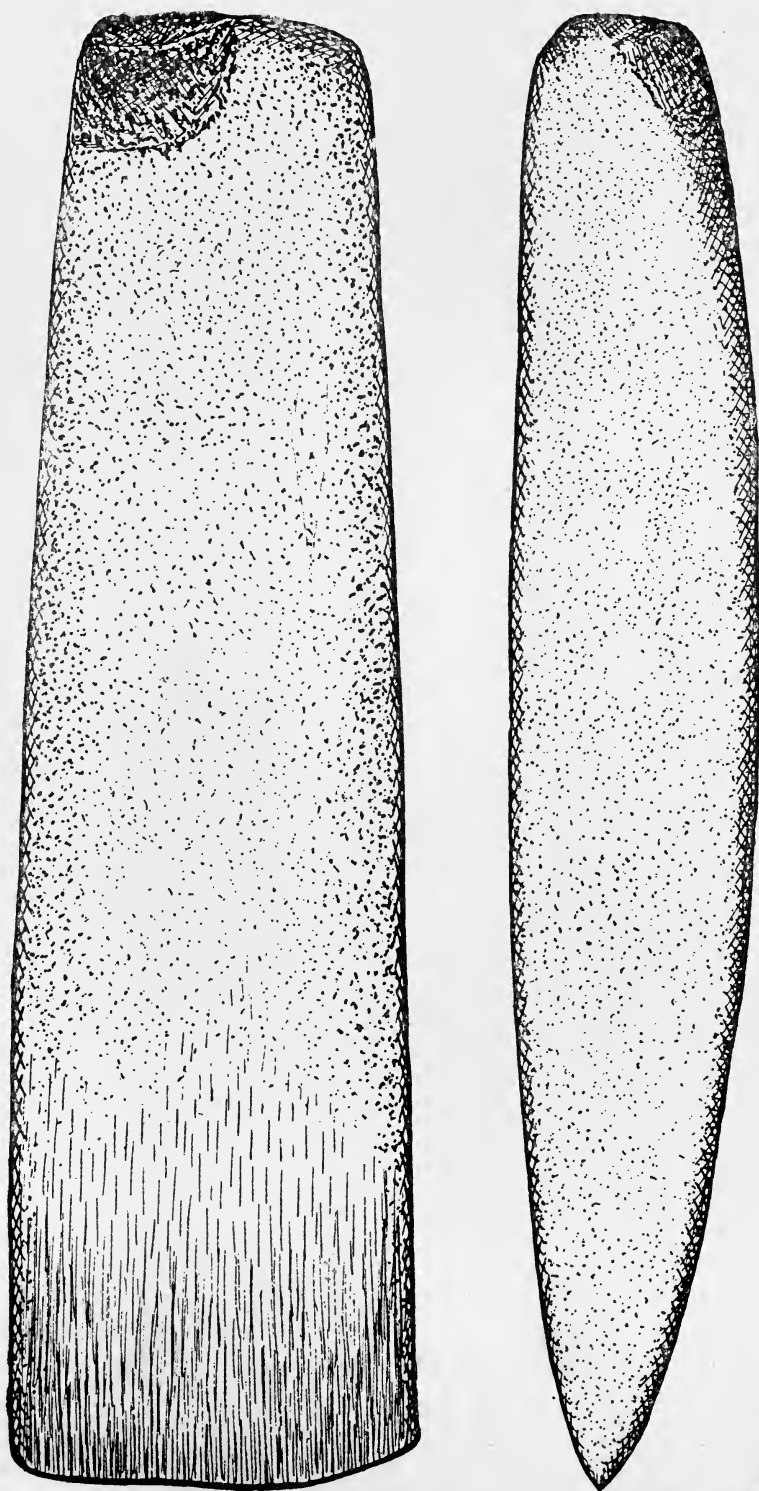


Fig. 28863—Full size.

Fig. 28863. We have here a very well finished and somewhat typical tool.

Perhaps most white men would say at a glance that such specimens were fitted to a handle (a knee-shaped branch) with the flat side to face the wood, but an examination of similar tools from Australia having the wooden handles attached to the heads, show us that the "Blackfellows" of our sister colony fitted the rounded sides into grooves in the wood, and it is not improbable that such was the method employed by the Indians here. At any rate the Australian custom ensured more stability in the haft than could be attained by placing the flat side against the wood.

SMELSER-ORR COLLECTION.

Early in the 1880's Mr. Joseph Smelser of Laskey, Ontario, who was a most enthusiastic archæologist, and who had at that time a very fine embryo collection of Indian relics, joined forces with the writer, and for many years we spent much time seeking out the ash beds, and opening the ossuaries throughout the Townships of Vaughan, York, Markham and King, as well as making excursions into the County of Simcoe. Most of the village sites in the township of Vaughan were investigated, and most of the specimens found were from village sites which had been absolutely uncontaminated by European contact. These are now in the Provincial Museum, by the courtesy of Mr. Thomas Smelser, whose only desire was to fulfil the wish of his venerable father. Few men with the arduous duties of farm life would devote as much time to archæology as he did. When any new village site was discovered and his advice was sought after, he was always most willing to give every assistance in his power.

The village sites of Vaughan are but a part of that large tract from Lake Ontario to the Georgian Bay, covered at one time by large and populous bands of Indians. Probably long before European contact the entire western portion of Ontario was occupied by the Huron-Iroquois race, or more likely, including all the tribes who spoke their common language.

We must always, in dealing with semi-civilized tribes, remember that they have no written language, and that in the course of several centuries, each new linguistic family grafted into the nation brings new words and some changes. Therefore, archæological remains, as found in the County of York, are very similar to those found in the district south of Lakes Ontario and Erie, and north away to James Bay. The village sites contribute to us a uniform variety of material in which there are, however, slight differences that time and changed circumstance will readily account for. These can easily be recognized by the close observer.

Many of the pipes in this collection are somewhat different from any heretofore found, and with further investigation I have no doubt much new material may be secured for the Museum. In every village site broken clay pipes are frequently found. Stone pipes are more usually surface finds. These finds lead to the question, "Were the Indians heavy smokers, and where did the habit spring from?" The early voyagers to America noticed that a curious practice prevailed among the Indians, described by them as a "fumigation of a peculiar kind." This they found prevailing in some form everywhere in America; and from the expressions of these early visitors, it is quite plain that the Europeans understood nothing about the habit.

Montezuma and his subordinate courtiers were said "to compose themselves to sleep by smoking." Jacques Cartier found the same practice prevailing on the lower St. Lawrence. Tobacco, or some mixture thereof, was invariably smoked in councils with the whites, for ceremonial or other purposes; but that it was mostly used as a solace to the nerves of the warriors, as well as to comfort the women slaves around the campfires, is an acknowledged fact. Of the antiquity of the habit we know nothing. Its uniform use over both North and South America would lead one to believe that it dated back for vast ages before European occupation. This custom alone would indicate that a vast period of time must have elapsed from the severance of the Eastern and Western races.

At the entrance to the Temple of the Cross, one of the many ruins at Patinque, in Mexico, stands a bas-relief showing the priest with a straight tubular pipe in his hand, smoking the same. The posture of the figure in the bas-relief is such as may be seen to-day when the Moki priest thus holds the pipe at a ceremonial dance. In Mexico and South America pipes were not in common use. The cigar or cigarette was used. The tobacco was dried and powdered, the wrapping of the cigarette was usually a leaf of corn. In all the Indian languages of North and South America words are found to designate the tobacco plant, and in the languages of the Northern tribes especially, there are commonly two words for tobacco, probably referring to different varieties of *Nicotiana*. The rapidity with which the habit spread into Europe is well brought out by a clause in the will of Diego Columbus, dated May 2nd, 1523, in which he made a legacy to a tobacco merchant in Lisbon. There are some forty varieties of the tobacco plant noted by botanists.

The following photo-engravings of pipes represent only a few of the collection, all of which were found, either by Mr. Smelser or myself. Many of the surface finds were secured by going over the newly sown wheat fields in the fall, after a nice rain. Axes and adzes were frequently found on the fences, placed there by the farmers.

PIPES.



Fig. 30880—Full size.

Fig. 30880 represents a limestone coral pipe, beautifully made, and evidently well polished when new. The ages of frost and rain that it must have gone through have certainly marred its surface, and slightly cracked the rim at the upper part of the bowl. The top of the pipe is nearly square; the raised rim around the top

is about one-eighth of an inch in width, and well and most regularly made. The hole at the stem of the pipe is bored much the same as in the stone pipes. The perforation at the base of the pipe is so made as to increase its strength, owing to the material being more friable.



Fig. 30874—Full size.

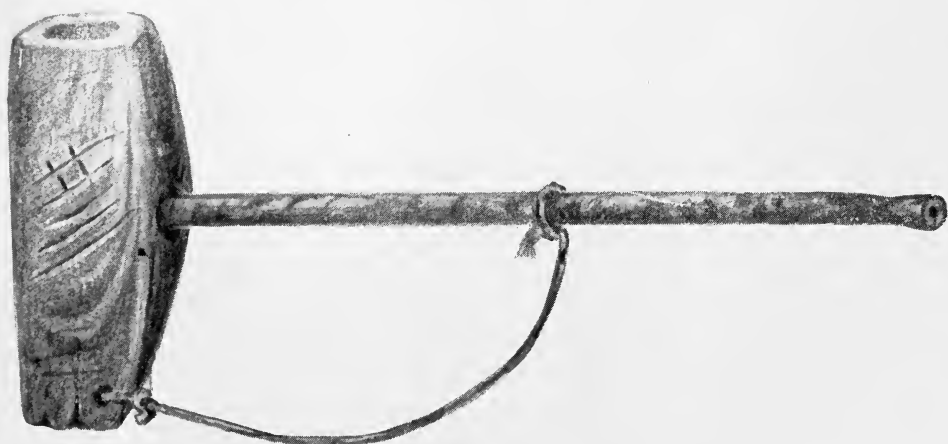


Fig. 30874—Three-quarter diameter.

Fig. 30874 is a beautifully marked slate pipe; a surface find on Lot 27, 5th Con., Vaughan. The pipe is somewhat peculiarly marked. On the upper part of the bowl there are four markings following across the face of the pipe—two to the left and two to the right. Immediately below this are two straight lines equidistant and equal in length. At the lower front part is the usual hole of stone pipes. On one side of the base are three deeply carved markings; on the other side, two, while on the reverse side—on that seen in the half-tone—there are four straight markings, finely drawn across the middle of the bowl of the pipe. The top of the bowl is nearly square, flattening down to a point at the base. The hole for the insertion of the stem is handsomely carved and quite regular. In illustrating this pipe, we do so with manufactured stem, showing the use the aborigines made of that stem hole in the base of the anterior part of almost all stone pipes. The handle was inserted into the base of the pipe and a thong of deer hide or a string of other material was used to attach the stem of the pipe to the bowl. This was evidently used so that the pipe and its stem could be kept together. Even to this day, amongst some of our northern Indians, I have seen the pipe used as spoken of. This pipe, before I received it, had been used for years and years as an ordinary smoking pipe.



Fig. 31044—Full size

Fig. 31044 is a Soapstone pipe, found on Lot 2, 6th Con. of the Township of King. It is of a nice grey soapstone, beautifully polished, with four circular rings in relief around the bowl. The pipe, as may be seen by the engraving, is well polished and artistically made. The base of the pipe is much larger than usual, and the hole for the stem is larger, and nearly one inch in length.



Fig. 31041—Full size.

Fig. 31041 represents a most beautiful and perfect specimen of a red clay pipe. In form it is somewhat unique, differing considerably from most pipes of its class. It is made from a lighter-colored clay and is finer in its grain than the average pipe. The markings around the bowl have been most artistically done. The rings can be seen in the engraving, and are perfectly regular and equi-distant. This pipe was found in the ash-bed, Lot 7, on the 5th Con. of the Township of King. It bears the appearance of having been made in the same manner as their stone pipes. The clay was moulded into shape, burned, and then drilled. Near the ash-beds where this pipe was found, is an enormous granite boulder, covered with evidences that it had been used for sharpening axes, and rubbing down other stone or copper implements. One of the copper spear heads now in the Museum was found in the same ash-bed as this pipe.



Fig. 30873—Full size.

Fig. 30873 represents a marble pipe, found on Lot 17, Con. 5, Township of Vaughan. It is made from white marble, and when perfect must have been a beautiful specimen of the engraver's art. The stem differs from that in other pipes in its length. The hole in the stem is perfectly drilled, and about an eighth of an inch across. It is situated at the lower part of the stem and slightly to one side. The inside of the bowl shows the marks of some sharp instrument, probably used for cleaning it out. The marble is polished most effectively, and the outside is a handsome dark color, though in places, as can be noticed, it is slightly marred. The capacity of the pipe is much larger than most of those in our collection.



Fig. 31036—Full size.

Fig. 31036 is a Huron shaped clay pipe, with the characteristic protruding square rim around the top. The bowl is flattened in the front, this flattening extending down to the stem, and from the appearance where the fracture occurred it probably extended along the upper part of the stem. This pipe was found in the Township of Vaughan. It is somewhat peculiarly marked around the protruding square at the top of the bowl—an oblong hole at each corner of the square, a deep line between them, and above it five dots, regularly made and equi-distant.



Fig. 31026—Full size.

Fig. 31026 has been a very respectably formed clay pipe. The markings on the bowl of this pipe differ from those on many of the others. While the stem is broken off, there is still sufficient left to show the exact shape of what was once a splendid specimen of the potter's art. The most unusual thing about this pipe is that it has two holes leading into the bowl of the pipe instead of one. In weight it is quite as heavy as the stone pipe, and, evidently from use, has been coloured quite dark.



Fig. 30917—Full size.

Fig. 30917 represents a clay pipe found in the ash beds of Lot 8, in the Township of Gwillimbury. It is very similar to other Huron pipes, many of which have been found all through that section of the County of Simcoe. It bears evidences of the fact that the Indian in smoking did not do as the Irishman does, insert the pipe between his teeth, as no teeth marks are to be found on the stem. The enlarged portion at the upper part constitutes the bowl; the stem runs up to the bowl in a very graceful curve an inch in length, and the hole in the stem curves up also and enters the bowl at its base.



Fig. 30921—Full size.

Fig. 30921 is a clay pipe found in Vaughan Township. The stem is broken off short and the bowl is chipped at its upper and front part. The face moulded on the front of it is very well done, but it does not bear any resemblance to Indian features. The markings on the back of the bowl represent a form of head-dress, nicely and regularly marked with two dotted lines.



Fig. 31040—Full size

Fig. 31040. This unusual shaped pipe bowl was found on Lot 28, 5th Con. of Vaughan. It is finished above the middle with a number of small holes around the enlarged part. The hole in the stem is small in size and about 1-16 of an inch from the upper part. The moulding at the top of the bowl is not very smoothly done.



Fig. 31042—Full size.

Fig. 31042 represents a pipe made of fine clay and well moulded. Age and use have darkened it very much in colour. The bowl represents a human figure in sitting posture, the face extending above the bowl and forming part of it. The features have a decidedly Indian cast. A number of pipes formed on this mould have been found. Some three or four were secured from the Township of Vaughan where this one was found. We have also in the Museum a number of stone pipes carved as this one was moulded. The head, and particularly the chin, is well brought out; the back of the head has been broken and shows that there had been a cavity where the brain should be. The arms and legs are very well executed, but, as usual, not moulded according to anatomical proportions. The scroll work both back and front is elegantly done, and when this pipe was new it must have been a work of art.



Fig. 30918—Full size.

Fig. 30918 is a small pipe two inches in length and nearly a half inch in width at the base of the bowl. It is made from the usual clay of the other pipes. It is perfectly formed, gracefully made, and, while it may possibly have been used as a toy for the children, it could also be used for the purpose of cigarette smoking, which was so commonly practised by the occupants of the South portion of this continent. This pipe was found in one of the ash beds in the Township of Vaughan, but though others were found in the same place, they were not so perfectly made, one having the stem broken off.



Fig. 30879—Full size.

Fig. 30879 is a small stone pipe, circular in outline, with a row of holes around the top of the pipe. Differing from most stone pipes, the flattening is on the sides at the base, and the remnants of what was once the hole for the suspension of the stem has been broken off. The hole in the bowl is very similar to those in other stone pipes. The bowl, while not very large, is quite large enough for a respectable Indian smoke; they were not to be found with a pipe in their mouths at all times.



Fig. 30972—Full size.

Fig. 30972 is a grey stone pipe, with a beautifully carved head on the front of the bowl. This, while probably intended to resemble a bald-headed eagle, is well shaped. The beak in particular is well made. The eyes, to imitate the ever watchful eye of the eagle, are very large, so large in fact that the cavities meet, and there is a small hole from one eye to the other. The bowl of the pipe is somewhat triangular in shape, with the breast of the bird extending forward and curving inward towards the head. The hole at the base of the pipe is bored from the anterior part of the pipe into the base, the larger hole being at the base, the smaller being at the front of the pipe. This hole presents the appearance of having been some-

what worn, as it evidently would be by the constant friction of the string or leather thong for attaching purposes to the stem. On the back, where the bowl of the pipe was, much still can be seen. Immediately below it is the hole for the insertion of the stem, a portion of which is still remaining, including the base of the pipe, immediately above the hole in which is the remains of the suspension hole of the original pipe. This pipe is one of a similar make to a number in our collection. It is made on the same principle as Fig. 31042 in this report—the figure of a human being in a sitting posture. The hole extending from the base of the pipe to the bowl is beautifully and most regularly bored, and is about three-quarters of an inch in length.



Fig. 30375—Full size.

Fig. 30875 is a stone pipe found in York Township. At one time it had been a beautifully carved piece of work. The face of a child adorns what was once the front of the bowl of the pipe. The remains of the bowl are still to be seen below and behind the face of the child, but after its partial destruction the expert pipe-maker again took it in hand and carved out a new bowl. This is only one of the many instances in which the Indian made use of a broken article to manufacture something new.



Fig. 30876.—Full size.

Fig. 30876 is an excellent specimen of a whistle. It is the only one of the kind in our collection. It was found on Lot 13, 3rd Con. of Vaughan. It measures two and one-half inches in length, three-quarters of an inch in width at its larger end, and one-third of an inch at its smaller. It is perforated through its entire length. Immediately in the centre is a drilled hole leading into the hole running through the stone. The specimen is of slate, well polished and in a splendid state of preservation. In conversation with a well-informed Indian some

years ago, I was informed that this whistle was used to call the deer, or for stopping them in their flight for the purpose of slaughter. While many bone whistles are to be found in ash beds, wooden whistles were extensively used by them.

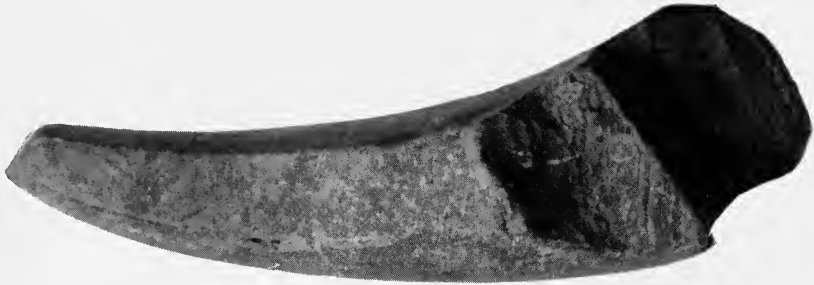


Fig. 31047—Full size.

Fig. 31047 belongs to that class of problematic stones classed as Banner Stones. Only half of the stem was found. Like most of these stones, it was not found on a village site, but was turned up by the plough in the field. It came from the Township of King, and has the usual axial perforation and the neatly made hole, as is well shown in the cut. This hole is perfect in outline, and the stone, from its varied colours and striation, must have been a thing of beauty.

WOOD AND BONE.

The primitive tools of earliest man were made of wood, and instead of classifying our earliest progenitors as belonging to the Stone Age, I think we might properly classify them as living in the great Wooden Age, which must have antedated the Bone and Stone Age by a long period of time. Thorns were their awls and needles; knots of hardwood their war clubs; and pointed wood their fish spears and arrows. Of their wooden implements we know but little. The "Jesuit Relations" informs us that wooden vessels were very extensively used, but being a perishable article there are few remains of wooden articles manufactured by prehistoric man in existence. He has left us in the Birch Bark Canoe a boat more useful, more artistic, and swifter than any such found in other parts of the world. Adopted by the white man, its graceful form may be seen on all our inland waters, both as a pleasure craft, and as a commercial commodity.

Following the Wooden Age came that of Bone. It, too, being perishable, only under exceptional conditions few specimens have been handed down to us. And yet we have every reason to believe that bone implements of every kind were in common use on this continent. Those specimens that we have are comparatively modern, only antedating the European occupation of this continent by a few centuries. In Europe it is otherwise. There in their caves, covered with stalagmite are to be found the remains of bone articles made by races of man absolutely unknown to us. In the caves of France, and in the caverns of England, bone articles are found most artistically engraved. So perfect is the engraving on some of them that to the untrained eye they would be looked upon as the work of some modern engraver. Such as these were preserved under the most favorable circumstances.

The bones of the Mastodon and other prehistoric animals were utilized by the aborigines. From them were made wedges, ornaments, and articles for culinary

purposes. The bone specimens made by our North American Indian, while frequently carved, are in no sense comparable to those of his prehistoric confrère in Europe, though in many of the articles a more than passing resemblance can be noticed. Their tablets of perforated bone resemble the American gorget; their needles, awls, and chisels are also strikingly similar. Southall, in his "Epoch of the Mammoth," shows a horn teaspoon from Switzerland precisely like some found in Onondaga County, N.Y., U.S.A.

The bone collections in Canadian and American Museums are not as large as one would expect. Excepting those preserved under the most favorable circumstances they have decayed and disappeared like the bones of their makers. I have opened burial places in sand where the bones were soft and friable. I have seen, also, the black outlines of the long bones of the body turned into silica, and nothing left of them but the colouring matter in the sand; again, I have opened an ossuary without any evidence of European contact, and of a probable age of not less than four hundred years, where the pit was a square one, dug out of hard pan, and until the time it was opened remained a cistern, filled with water, and I have found bones in a good state of preservation. All the bone implements found in this province are taken from village sites or kitchen middens where the ashes from their winter fires had been deposited—the hardwood ashes acting as a preservative, and so great a preservative that after the lapse of many hundreds of years specimens have been taken from their ashy bed as perfect as the day they were made—the points of the awls so sharp, smooth and glossy one would think they had only left the maker's hand yesterday.

Bones also were largely used in the making of dice and tubes for gambling purposes. The Huron-Iroquois, during the long winter nights, spent much of their leisure time playing games of chance, and, like their European successor, made dice their favorite form of gambling. In most cases the counting was done numerically, using pieces of bone or pebbles. The dice were mostly flat, being painted on one side and marked or grained on the other. A number of specimens are to be found in the Museum. Dice were also manufactured from the broken pottery lying around the camps, numerous specimens of which can be found surrounding and in their ash beds. Perrot says: "The savages have also a sort of game of dice, the box for which is a wooden plate, well rounded and well polished on both sides. The dice are made of six small, flat pieces of bone, about the size of a plum stone. They are all alike, having one of the faces coloured black, red, green or blue, and the other generally painted white or any different colour from the first-mentioned face. They throw these dice on the plate, holding the two edges, and on lifting it they make them jump and turn therein. After having struck the dish on the cloth they strike themselves at the same time heavy blows on the chest and shoulders while the dice turn about, crying "Dice, dice, dice" until the dice have stopped moving. When they find five or six showing the same colour, they take the gains which have been agreed upon with the opposite party. If the loser and his comrades have nothing more to play with, the winner takes all that is on the game. Entire villages have been seen gambling away their possessions, one against the other, on this game, and ruining themselves thereat. They also challenge to a decision by one throw of the die, and when it happens that a party throws *six*, all those of the tribe that bet on him get up and dance in cadence to the noise of gourd rattles. All passes without dispute. The women and girls also play this game, but they often use eight dice and do not use a dice box like the men. They only use a blanket, and throw them on with the hand."

AWLS.

Figures 30864, 30863, 30862, 30865, 31083, 31084, 31082. In this collection there are some very fine specimens of bone: these awls in the Museum are probably unique. Their fine finish and beautifully rounded points mark



Fig. 30863—Full size.

Fig. 31083—Full size.

them as having been made by some pre-Huron race. The ash bed in which the awls were found was situated on the banks of the Little Humber, Lot 16, Con. 7, Tp. of Vaughan. The peculiarity of this ash bed, situated on the second river bottom, was, in the first place, its extensive size and great elevation, some thirty-five feet long by twenty feet wide, with a depth of ashes of from three to five feet.

On making a cross-section we found the evidence of a dual occupation—a layer of dark vegetable mould separated the ashes. That above the mould contained al-



Fig. 30862—Full size.



Fig. 31082—Full size.

most no remains except some broken pottery and remains of pipes, but in the lower deposit the awls, forks (or whatever they may be called), illustrated, were

found. They vary in length from seven and three-quarter inches to five and one-



Fig. 30864—Full size.



Fig. 30865—Full size.

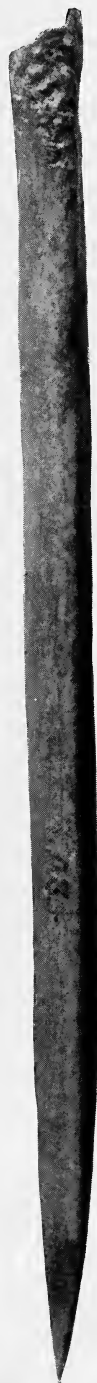


Fig. 31084—Full size.

half inches. In most of them the elegantly polished points extend more than half

their length. Their workmanship, and the conditions under which they were found, would lead one to believe that they were pre-Huron in their origin, and the probability is that they were the work of a branch of the Iroquois family previous to their establishment or the union of the tribes, as it is a well-known fact that the Iroquois family had very little veneration for bone, and consequently they became more expert in their workmanship.



Fig. 30843—Full size.



Fig. 30848—Full size.



Fig. 31090—Full size.



Fig. 31092—Full size.

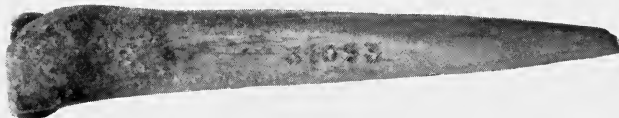


Fig. 31093—Full size.



Fig. 31096—Full size.

Figures 30843, 30848, 31090, 31092, 31093, 31096, are all smaller specimens of awls, many of which were found in ash beds in Vaughan and York. They are short, some of them very well made, and have the appearance of having been used for heavy or thick work, where a short awl would be the most useful.

Figures 30868, 31098, 31099. These needles are flat and perforated in the centre. The European needles are perforated at one end and quite sharp at the



Fig. 30868—Full size.

other. The needles used by the Indians are flat and thin, often rounded at the ends like those in this set. These could only have been used in coarse work and should be called bodkins. The fine sewing was done with the sharp pointed awl and a hemp or sinew thread. It is probable that for fine stitching the bone awl



Fig. 31098—Full size

was used, and that the sinew or hemp thread was carried through the hole. Mr. Morgan says of needles and their uses: "A small bone near the ankle joint of the deer has furnished the moccasin needle from time immemorial; and the sinews of the animal the thread. These bone needles are found in the mounds of the West,



Fig. 31099—Full size.

and beside the skeletons of the Iroquois where they were deposited with religious care. This isolated fact would seem to indicate an affinity, in one article at least, between the Iroquois and the Mound Builders, whose name and era of occupation and destiny are entirely lost."



Fig. 30867—Full size.

Fig. 30867 evidently was used as a shuttle in the process of weaving. It is coarsely made, particularly at one end, blunt and somewhat larger at the other. It is not by any means a work of art, never having been even polished. It was found on the Miller farm, York Tp., where the large pot, described p. 20, fig. 1, *Archæological Report*, 1907, was found, at which ash-bed,—and it covered many acres—very few bone implements were found.

Figures 30808, 30812, 30799, 30818, 30814, 80802, 30806, 30816. The above so-called bone beads were numerous throughout the ash-beds. They are



Fig. 30808—Full size.



Fig. 30812—Full size.



Fig. 30818—Full size.



Fig. 30814—Full size.



Fig. 30802—Full size.



Fig. 30806—Full size.

not by any means uniform in length or size. As beads they would not be very ornamental, and were most likely used in some of the many games played by the



Fig. 30799—Full size.

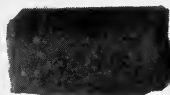


Fig. 30816—Full size.

Indians. The cutting of the bone was somewhat coarse, and most of these bones look as if they had been filed with a stone instrument and then broken.

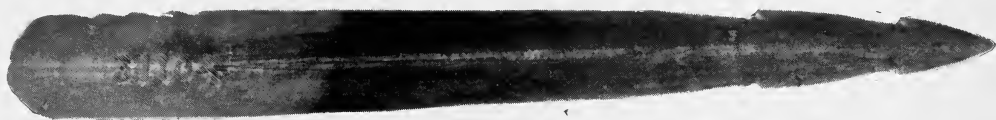


Fig. 31104—Full size.

Fig. 31104 is a harpoon five and one-quarter inches long, and five-eighths of an inch wide at the centre. At the point it is double barbed, rounded at the upper end, with four notches on one side, evidently made for the purpose of fastening the shaft for throwing and the string for drawing in the fish when speared. Many of these spears have a hole for attaching a line. It is thin and well pointed, and under any circumstances would be a very formidable weapon. Few early articles of horn or bone were more widely used than harpoons of various forms. The astonishingly few numbers of these found can only be accounted for by their destruction by small animals, and their rapid decay when away from preservative material.

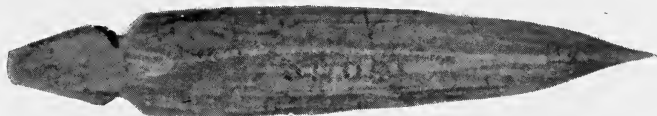


Fig. 31105—Full size.

Fig. 31105 is a spear with an unusually sharp point, notched on both sides at its base. It has the appearance of having been made with a cutting instrument, and had it not been found by myself, so located that European contact was impossible, I would have said that it was cut out with a knife. It most assuredly was a dangerous weapon, either as a spear or as an arrow head. Bones made as this one are most unusual in our collections; it is not even polished.

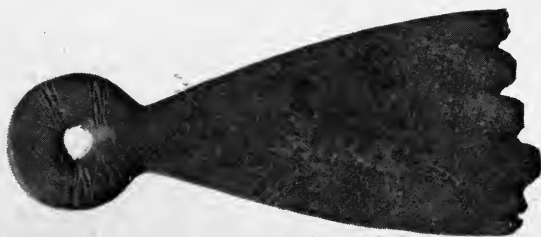


Fig. 30824—Full size.

Fig. 30824 has been an excellent specimen of a comb. The six teeth are broken off short. It is very nicely shaped, with a perforation in the rounded top.

The bone shows the effects of age. It has been frequently said that Indian combs were the result of European contact; in this case I removed this one from the ash-bed where it was deeply embedded, and so situated as to indicate that it had been there long before the village site had been deserted, so long that Eastern contact was impossible. The Indian use of combs does not appear to date very far into prehistoric times, but the fact is that they were so perishable that we must not express opinions. We do know, however, that many were made of wood.



Fig. 31013—Full size.

Fig. 31013. This string of wampum was found in an ossuary situated in a sand hill on Lot 24, Con. 7, Vaughan Tp., about fifty-five years ago. There were many specimens removed therefrom at that time, amongst others was a copper kettle, showing that at least, the products of European labor had extended this far. There was also found in this ossuary a tibia with a copper band around it where a fracture had taken place, and the bone had grown up around it and become useful. That those beads were purely Indian is extremely doubtful. Immediately after the Puritan set his foot upon American soil, he took advantage of the Indian desire for beads, and soon the manufacture of such articles was extensively carried on, and the impress of machine art can still be seen upon many of them. The Indians were great imitators and soon they became adepts at transfiguring their shells into beads. While these illustrated have all the appearance of being Indian made, they are without doubt simply copies of the European article.

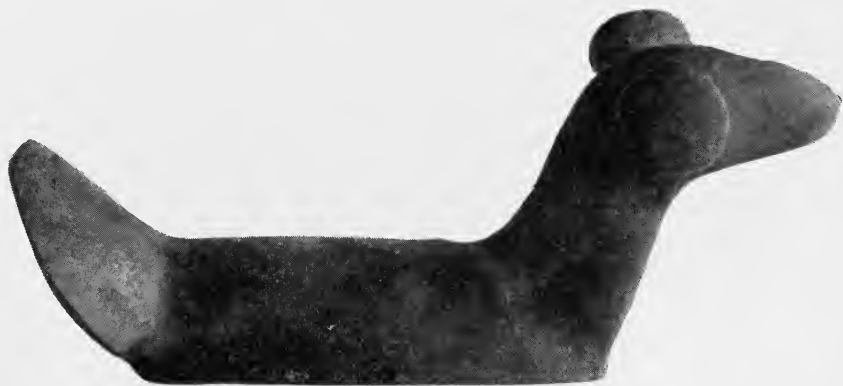


Fig. 31045—Full size.

Fig. 31045. We have here another form of Bird Stone. In this we have the protruding knobs on one end, with a stub tail on the other shaped like a saddle. The surface is slightly concave, like many of these stones. It is a work of art, and shows, on the part of the sculptor, a good knowledge of proportion and detail, in fact it makes one think there must have been a great diversity of intellect among the natives, probably not more than we have among our uneducated races to-day, but enough to show that they were fast merging into the stages of partial civilization.



Fig. 31025—Full size.

Fig. 31025. This is also what is called a Bird Stone. This name is given to a class of prehistoric stone objects, and for what purpose they were used is not known. It has been suggested that "in olden times these ornaments were worn on the heads of Indian women and only after marriage," and suggest that they may have symbolized the brooding bird. The protruding eyes are absent from this specimen, and it is not so well polished as usual. The holes at the lower angles are quite characteristic. The perforations at each end are well drilled and made according to the usual form. The beak of the bird comes to a sharp point not rounded as in most cases. The head on one side is about one-eighth of an inch lower than the other.



Fig. 31046—Full size.

Fig. 31046 is also classed with the Bird Stones, but in general appearance it is more like a saddle. It is void of a head or eyes, with perforations at angles of base, and grooved surfaces on either side of holes, indicating that it may have been attached to the head or some other part of the body. This stone was found on Lot 13, Con. 3, Township of Vaughan.



Fig. 31014—Full size.

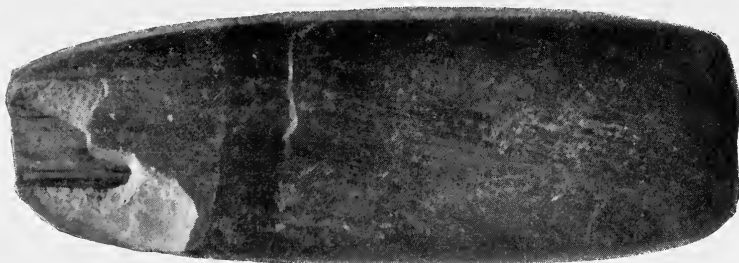


Fig. 31049—Full size.

Figures 31049 and 31014 are solid stone tubes; both specimens were found in the Township of Vaughan. One is somewhat shorter and thicker than the other. The use these stones have been put to, according to archæologists, is very vague, from cupping devices used by the medicine men to tubes for smoking the pipe of peace. The drilling of these stones is a work of art. The hole from end to end is perfectly straight, at times reaching from side to side and from one end to the other. Whatever their use, they show a work of people well worthy of a higher state of civilization. On one of these stones we have a series of marks on one side, as if it had been used for tallying purposes; they number forty. In dealing with problematic stones of this kind, we must always remember that the Indian was as skilled a gambler as his European contemporary; this may explain the use of some of these stones.



Fig. 31015—Full size.

Fig. 31015 is a piece of red Huronian slate, bored with a hole slightly increasing in size from the smaller end to the larger. This stone has the appearance of being unfinished, or, if finished, made from a rough piece of stone, the cracks being unpolished. Like many of the other stone tubes, its use is very uncertain. From the appearance of the tube it is possible it may have been used as a whistle by the insertion of a small marble within the larger end. Similar tubes have been used in that way by the Indians of the south-west.

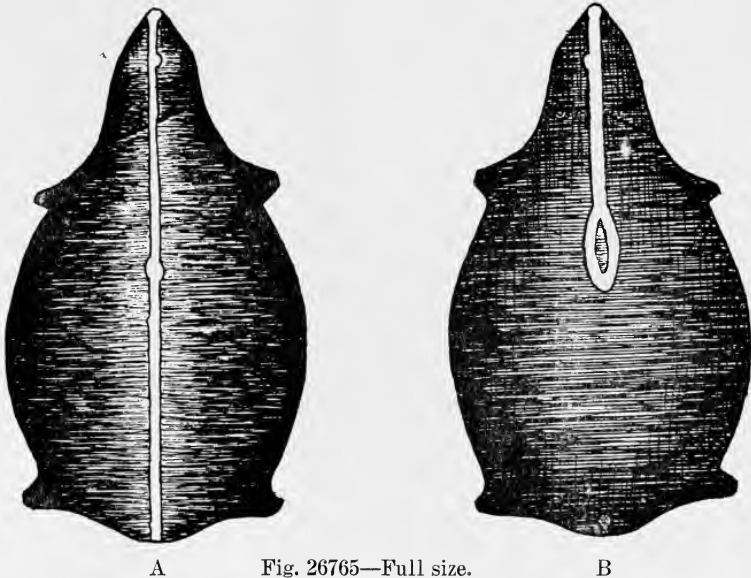


Fig. 26765—Full size.

Fig. 26765. The turtle form shown by figures *A* and *B* 26765 not only exemplifies what is perhaps a totem-form, but illustrates a somewhat unusual mechanical device sometimes seen on north-west stone pipes that have been broken. A seat is cut in the material, extending across the fracture, on each side of which holes are bored, partly, or wholly through, and into this seat molten lead or silver is poured. In this case the metal looks like silver, but is probably lead. It will be seen that as the metal enters the holes it acquires a holding power longitudinally, which otherwise it would not possess.

We are so much disposed to regard the Indian as a mere savage that it is difficult for us to give him any credit for mechanical ingenuity beyond what is

necessary to exercise in the making of tools and weapons in a manner similar to that which has been sanctioned by the custom of centuries, and in this case we feel like attributing the use of the device in question to intercourse with the white man. There is no doubt, however, that in this case, no matter where he may have procured the idea, what looks like ornamentation was done wholly on purpose to remedy a break, that had separated the head from the body.

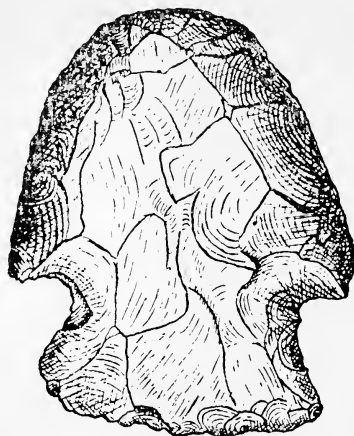


Fig. 29388—Full size.

Fig. 29388 shows what is known as a scraper or spud. A “spud” or a “scraper” such as this, is supposed to mean a tool for removing flesh from skins or for smoothing wooden surfaces, just as carpenters sometimes use pieces of glass.



Fig. 29388 B—Full size.

The edge view (Fig. 29388 B) will show how this tool was useful in the way indicated. A sharply formed angle may be seen at the lower end, admirably formed for scraping purposes. This scraping edge may be of accidental formation (indeed, it is anything but easy to understand how it could have been formed purposely), but in any case this degraded form of a spear or of an arrow-head must have proved a very serviceable implement.

Only one feature of this tool might lead us to doubt the “degrading” process, and that is the great strength of the neck.

SHELL RELICS.

Although civilized man has but little use for shells, to the untutored savages they were not only of considerable economic importance, but were also extensively used in the ornamentation of their persons. The attractive colors of many shells made them readily adaptable as ornaments. Many of them were no doubt highly valued on account of their beauty, and perhaps, also, on account of

a superstitious veneration for the shells themselves. Shells with the mouth aperture turned to the left, as were the Busycons, may have been special objects of reverence; the Chinese even yet believe that a conch shell with the whorl turning to the right has the power of quieting the waves when blown upon loudly.

The bulk of the shell material used by the Indians in Ontario was obtained from beyond the borders of the Province, most of the shells coming from the Atlantic seaboard. Some shells even came from such distant parts as Central America. The occurrence of these shells so far from their native habitat is the best evidence we have of the extensive commercial relations which existed between the widely separated inhabitants of North America, although we must not forget that the arrival of Europeans gave a considerable impetus to this trade, and most of our shell relics were introduced after the arrival of the early French traders and explorers. This we know from the fact that they are almost entirely absent from prehistoric sites, while they are most frequently found in direct association with relics of iron, brass, and glass of European manufacture.

On prehistoric, and also on sites belonging to a later period, we find numerous land and fresh-water shells, which had been put to a variety of uses.

One of the many uses of shells was for culinary purposes. The largest of the introduced shells, such as the conch and Busycon, had the interior parts skilfully removed and thus made serviceable cups or ladles, of which there is a fine example from an ossuary in Beverly township in the Museum. We may be quite certain that many of our ordinary clam or mussel shells were frequently used as spoons, because they required very little alteration to adapt them to such a use. In Kentucky and Tennessee these shell spoons were a little more specialized, being cut so as to form a handle on the hinge side. It is an interesting fact that these are all made from left valves, and the position of the handle indicates that they were made for use with the right hand.

Clam shells may also have come in for some considerable use as knives, the sharp edges of some species making them quite useful. Early writers and explorers make reference to such use of shells. Among the Indians of the South sharp shells were used as razors and for cutting the hair, and two valves of a shell were sometimes employed as tweezers for pulling it out. There is no evidence of such a use of shells in Ontario, at least the *Jesuit Relations*, almost our only source of information regarding the Indians of Ontario, do not speak of it. Our clam shells were extensively used in the manufacture of pottery, both as smoothers and scrapers and as a tempering material. Some pottery in the Museum contains this shell tempering material, and the clay of which many of our pipes are made also seems to contain a good proportion of it. It is of interest to note that the majority of the shell scrapers had been used by right-handed persons. Another use to which clam shells may have been put in Ontario was in tanning. Some modern tribes of Indians have used them for this purpose in recent years. A few may also have seen service as scrapers in woodworking. In Ohio the shells of a large, massive species of fresh-water clam were perforated for attachment to a handle, and were used as hoes. None of our *Unio* shells appear to have been used for this purpose.

It was as ornaments, however, that shells came in for most extensive use, and shell was the favorite material all over America for beads, pendants, gorgets or breast-plates, and other ornaments. The fresh-water shell beads are the most common on prehistoric sites, and those made from the larger ocean shells occur more frequently on sites known to be post-European. With the exception of the

large engraved gorget obtained from one of the Rice Lake mounds, which is undoubtedly of prehistoric age, very few, if any, of these objects have been discovered on early sites.

The Indians were fond of bedecking themselves with all kinds of ornaments, and beads especially were much favored. According to Champlain the Huron girls lavishly adorned themselves with wampum beads on festive occasions. Large quantities of beads have been found in graves, ossuaries and mounds. Dr. Boyle discovered 865 small disc-shaped beads on the neck of a skeleton in the Princess Mound, Rice Lake, and in the same mound were 300 beads made of a small ocean univalve. But this seems as nothing compared with the large numbers which were found in mounds in the United States; the Grave Creek Mound in Virginia alone yielded between three and four thousand beads.

Small entire shells were most frequently used for the purpose, especially in prehistoric times, and nearly all are fresh-water species found in our inland rivers and lakes. The shells of several of our water snails and also a few of our land snails were perforated through the lip for suspension. Disc-shaped beads made of the fresh-water clams are very scarce. Two or three different species of entire ocean shells used as beads are in the Provincial Museum. These in their original state are all more highly coloured than our native species and, we may be sure, were very highly prized.

Of shell beads made from the Interior columns of the larger ocean shells there are many different kinds. Some are spherical, others are disc-shaped, while others again are cylindrical and from one to over six inches long, with a general diameter of about from three-sixteenths to three-quarters of an inch.

Fig. 28750 represents a string of some of the more common forms, which were found in a grave near St. David's, Ontario, by Dr. Boyle. Some of the larger ones are over two inches in length. There are fifty in this string and they were all found in the one grave. The short, cylindrical beads shown in fig. 28747 are of the usual form and average about five-eighths of an inch in diameter. Two of them are triangular in shape rather than round. These were also found in the grave at St. David's. There is also a small string of sixteen disc-shaped beads (fig. 28748) ranging from one-quarter to five-eighths of an inch in diameter, from the same place.

Very unusual forms are sometimes met with. There is one in the Museum collection of the cylindrical type, about one and five-eighths inches long and one-quarter inch in diameter, which is peculiar in having the holes bored somewhat like those in bird amulets, instead of from end to end as in most specimens of this class. Another one has the holes drilled through from side to side at each end. These both come from Beverly Township.

The runtee is another variety of bead numerous represented in the Museum collection. These are flat, oval pieces of shell with a hole drilled from end to end through the narrow side. There are also some pieces which are almost square and some are rectangular. An oval one from Port Colborne has an oblique hole drilled through one end. Others are provided with two holes and one of these is over two inches in diameter.

Illustrations of the different beads are given on Plate VIII., figs. *e*, *f*, *g*, *h*; Plate IX., figs. *a* to *o*; and fig. *o* on Plate X. of the report for 1907.

Many shell beads were used as wampum, although there was also one kind which was made for this special purpose. This was small and cylindrical and was



Fig. 28750—Half diameter.

about one-quarter of an inch long by about three-sixteenths of an inch wide. This is the kind that is most often meant in historical references to the use of wampum. Another variety was disc-shaped, and these are the most numerous represented in the Provincial Museum. These, as already mentioned above, were made out

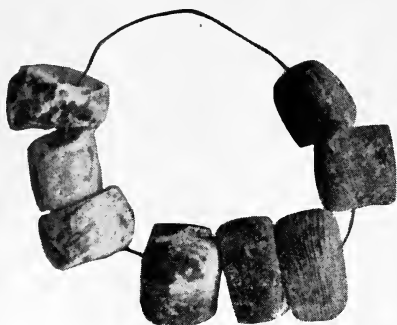


Fig. 28747—Full size.

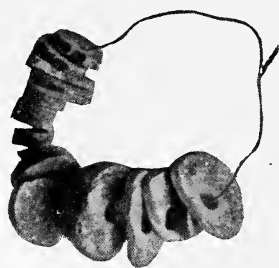


Fig. 28748—Full size.

of the solid interior columns of ocean shells. The cylindrical wampum is made of the quahog or "hen" clam, found on the Atlantic coast, the purple spot at the posterior end of the shell forming the more valuable blue wampum.

Some of the early travellers and traders give minute accounts of the process of manufacture. These accounts are given fully in the report for 1907, pages 78, 79.

The use of these shells as a medium of exchange probably originated in the value set on them as personal ornaments. The really extensive use of these beads as currency did not commence until they began to be manufactured by the whites, the enterprising Dutch colonists being the first to employ machinery in their manufacture. Indeed, the Dutch themselves, and the early English colonists, too, owing to the scarcity of other currency, adopted it as a standard of exchange; and we read that even church offerings were often made with wampum by these early settlers; and it was also used by our Canadian Indians, as we learn from the *Relations*, for the same purpose and even to obtain prayers for the repose of the soul.

We may be quite certain that most, if not all, of the wampum found in Ontario has been manufactured to the south of us, and reached our Indians, whose culture was already considerably affected by white contact, through the channels of trade conducted by early French traders.

Wampum was not only used as currency or in ornamentation but was also used for presents; it was often paid as a ransom for prisoners, and with it atonement was made for crimes committed by the Indians; it was sent with messengers as their credentials, and represented the chief's authority; the Iroquois exacted annual tribute in the shape of wampum from neighbouring tribes. Wampum was also woven into belts, with various designs worked in with the different coloured beads, and as such were permanent records of some transaction or treaty. It was also strung on strings, and these, according to the different arrangement of the white and purple beads which composed it, conveyed some meaning to the "keeper of the wampum," the archivist of the tribe. These and the belts are, by some ethnologists and archaeologists, considered to be later adaptations of the use of wampum.

This shell currency had a fixed value among the Indians. The values are variously given by early travellers such as Adair, Beverly and Brickell. Roger Williams also refers to its value, in the currency of the time, in his *Key*. Beverly says the English traders valued the white at nine pence a yard and the purple at eighteen pence. Williams tells us that six of the white beads were equal in value to one penny and the purple were worth three for a penny. One fathom, according to him, was once valued at ten shillings, but later the value dropped to five shillings per fathom. Among the Dutch it is known to have reached as high as four guilders, or one dollar and sixty-six cents. With the introduction of inferior beads and quicker means of manufacture, the value fell, and it was finally no longer regarded as legal tender.

Of pendants there are all kinds, from rough, unfinished pieces of ocean shells and *Unios* with a perforation at one end to some nicely finished specimens. These are of various shapes—some oval, others round, and some mere narrow strips. Entire shells were also used for the purpose, some being perforated for suspension, while others are notched.

There is another class of shell objects, of which we have only one found in Ontario, and these are known as pins. They may also be pendants, and Thurston refers to them as "bracketts," but their precise use is not known. A few are perforated. A specimen in the Museum, which comes from Nottawasaga Township, is provided with a suspension hole, and this would seem to indicate that it was worn as an ornament. It is shown in fig. *g*, Plate XII., in the report for 1907.

Many other peculiar ornaments were fashioned from shells. The Museum collection has one made of *Unio* shell which represents a fish, even the eyes and mouth being indicated. Several holes are provided for suspension and for the attachment of other ornaments. Unfortunately, the tail portion is lacking in this interesting specimen. Another object, made of ocean shell, resembles a lizard. It has one perforation. Both of these specimens were found in Beverly Township.

Round, oval, sandal, and pear-shaped plates, known as gorgets or breast-plates, were made of the large *Busycon* shells and the Giant Conch. They are found along almost the entire eastern seaboard of the continent, and are even met with as far inland as Tennessee, Ohio, Nebraska, Ontario, and Manitoba. They must have been highly valued, for we find them among the treasured objects buried in the graves. Judging from the numbers found in Ontario, they were a popular kind of ornament among our aborigines. Like the conch-shell beads and wampum, they occur most frequently in localities yielding European relics, and so are of a comparatively late date.

Only two engraved gorgets have so far been met with in Ontario. One of these was evidently brought in from the south, the design on it, a conventionalized figure of a rattlesnake, being similar to that on gorgets found in Tennessee. A good illustration of both these specimens is given in the report for 1907, fig. *f*, plate XII, and fig. *a*, plate XIV.

Most gorgets have only two suspension holes, but many are also provided with three and more. These extra holes may have been intended for the attachment of other ornaments, and possibly, also, for pearl settings, although pearls have not been met with on an aboriginal site anywhere in Ontario. They are of all sizes, from those less than two inches in diameter to those fully six inches across and seven or eight inches long.

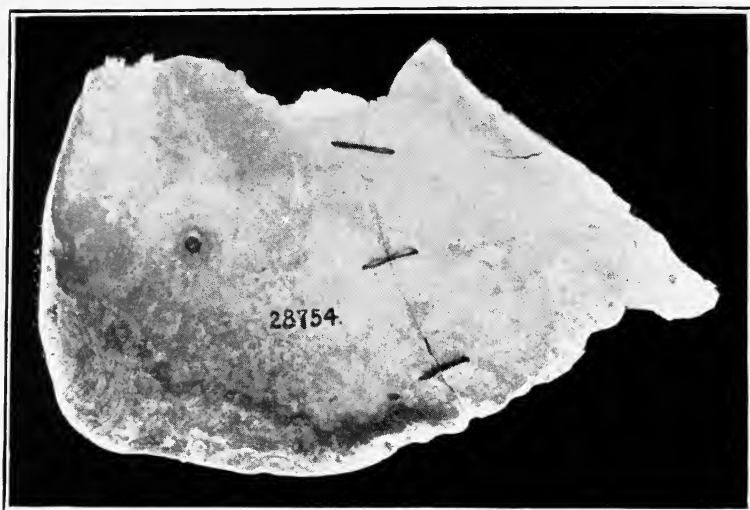


Fig. 28754—Half diameter.

We present an illustration of one of the largest ones so far obtained in Ontario, fig. 28754. This is an unusually large one, being eight and one-half inches long, and must have been longer, because part of the lower portion is broken away, and it may have been fully seven inches wide when whole. It has a single perforation, but there must have been another in the missing portion. This specimen is made of the lip of a large *Busycon* shell. The proud possessor of this gorget was no doubt envied by the other members of the tribe, but he must have found it at times a rather cumbrous ornament. It was found in a grave near St. David's by Dr. Boyle.

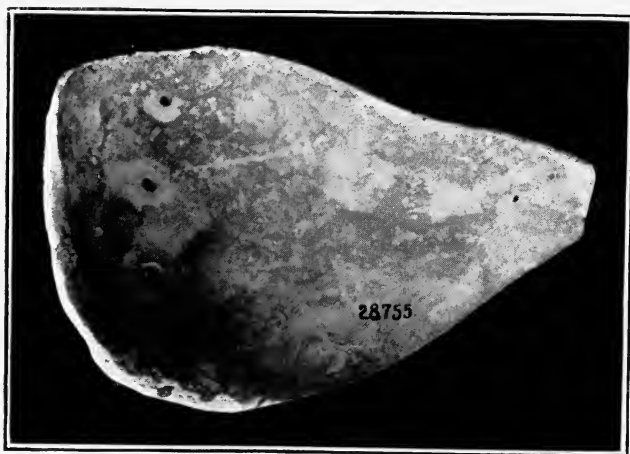


Fig. 28755—Half diameter.

Fig. 28755 shows one of the same type. This was found in the same locality as fig. 28754. It also is made from the lip of a *Busycon*. There are three holes at about equal distances apart, but only the two middle ones were used for sus-

pension. It is seven inches long and four and three-quarter inches wide. It is in a much better state of preservation than the one shown in fig. 28754.

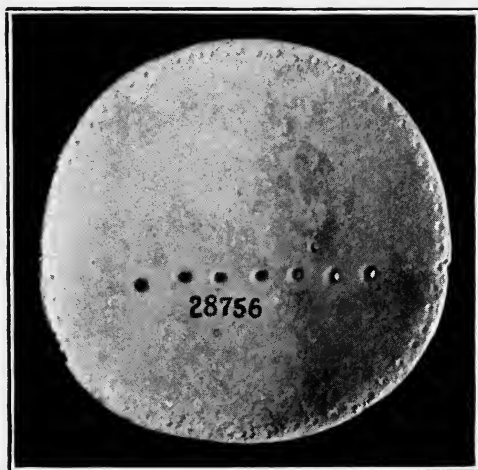


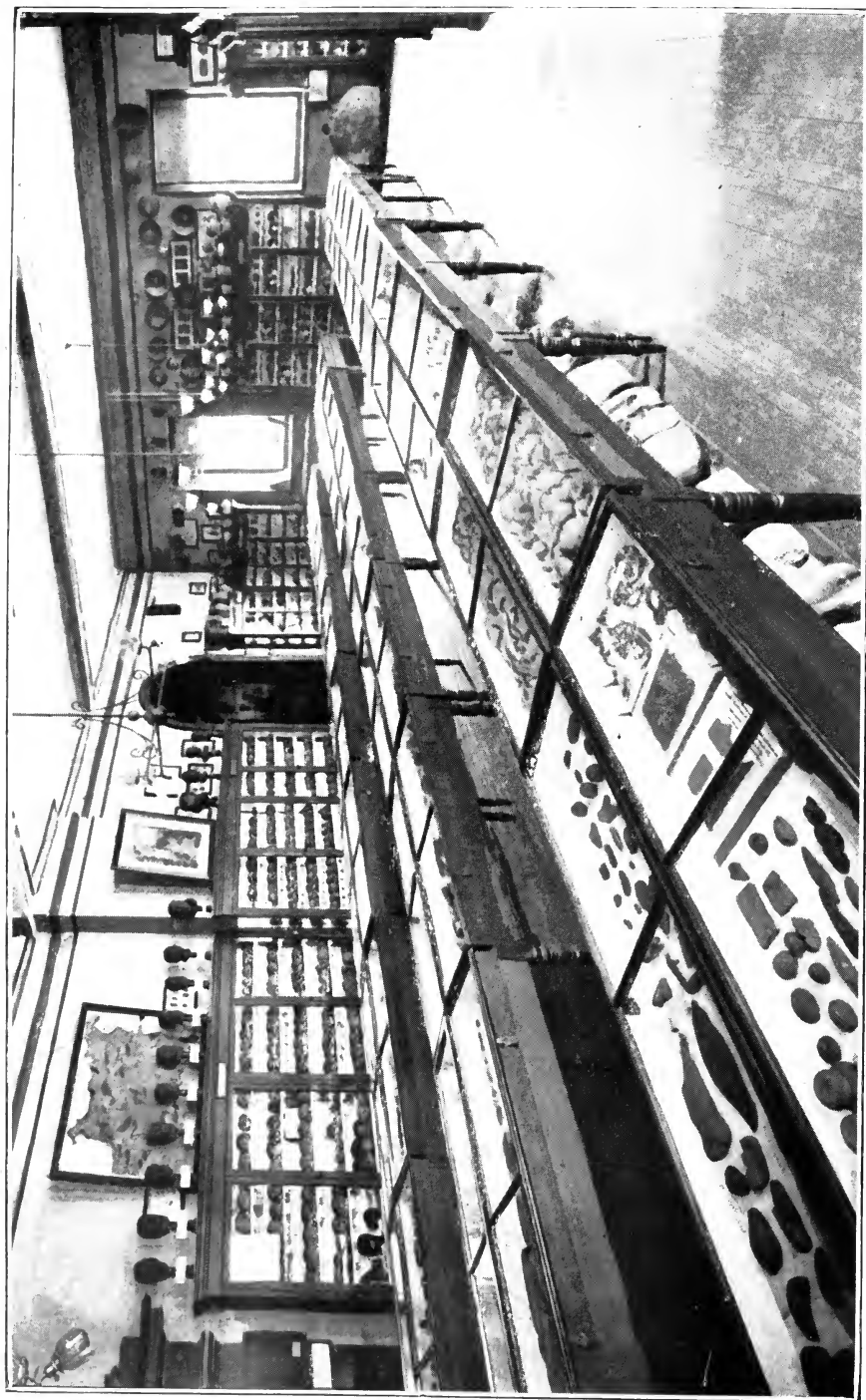
Fig. 28756—Half diameter.

The round one shown in fig. 28756 is interesting on account of the number of holes, and the presence of shallow pits, about one-quarter of an inch apart, around the edge of the gorget. It is provided with eight holes, seven being in a row across the middle, and the other about three-eighths of an inch away. The two outer holes may have been the ones used for suspension. It is a little more than four and one-quarter inches in diameter. Traces of the original natural colouring are still visible on the convex side, and it appears to have been made of the Giant Conch. It must have been a beautiful object originally.

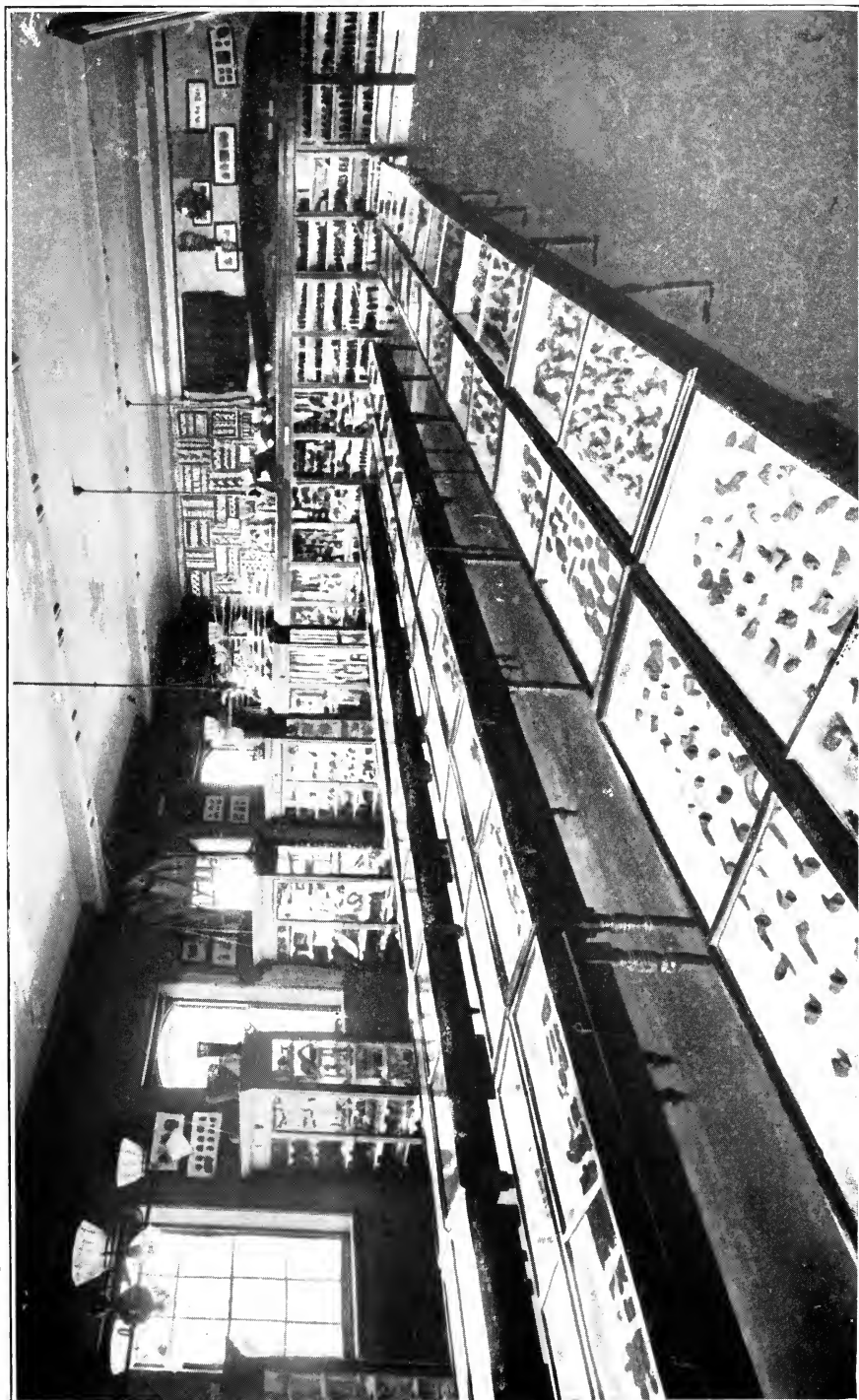
HURONIA.

The fifth report of the Bureau of Archives of Ontario has just been issued. The volume is truly a credit to the Provincial Archivist, Dr. Alexander Fraser, and must have entailed a great amount of editorial labour. The work is the result of many years close study by Rev. Father Jones, S. J., the learned Archivist of St. Mary's College, Montreal, whose archæological and historical accomplishments have obtained recognition on both the American and European continents. The Report is of permanent value, and the Bureau of Archives has laid investigators of our early Canadian history under a debt of gratitude by its publication. We quote a portion of the volume on the Wyandots' place in the Great Huron-Iroquois family.

"At some unknown date all the Iroquois and Huron tribes formed but one single people. This fact noted more than two hundred and fifty years ago by Father Jerome Lalemant has since been acknowledged by every modern Indian philologist as fully established. If language may be taken as a fair criterion to go by, the Hurons proper were the original stock from which sprang all the branches of the great Iroquoian family, whether included in the primitive confederation of the Five Nations, or standing apart territorially, within historic



Main Archaeological Room—West View.



Main Archaeological Room—East View.

times, as did the Tuskaroras, the Cherokees and the Andastes. Father Chau-monot, who was thoroughly versed in the Huron and Iroquois tongues, and who had lived as missionary among both nations, says in his autobiography that 'as this language (the Huron) is, so to speak, the mother of many others, particularly of the five spoken by the Iroquois, when I was sent among the latter, though at the time I could not understand their language, it took me but a month to master it; and later, after having studied the Onondaga dialect only, when present at the councils of the Five Nations assembled, I found that by a special help of God I could understand them all.' It was for this reason that Father de Carheil, the Indian philologist, who has laboured among the Onondagas and Cayugas, chose the Huron idiom as the subject matter of his standard work. He compiled his *RADICES Huronicæ*, comprising some nine hundred and seventy verbal roots, as a text-book as well for future Iroquois missionaries as for Huron. A more modern authority, Horatio Hale, had no hesitation in saying that the Wyandots of the Anderdon Reserve used the most archaic form of the Huron-Iroquois speech that had yet been discovered. These Wyandots were for the most part descendants of the Petun Indians, the nearest neighbours of the Hurons proper, who spoke a dialect but slightly different from that of the latter."

THE HURONS.*

"More than two centuries have elapsed since the Hurons vanished from their ancient seats, and the settlers of this rude solitude stand perplexed and wondering over the relics of a lost people. In the damp shadow of what seems a virgin forest the axe and plow bring strange secrets to light: huge pits, close packed with skeletons and disjointed bones, mixed with weapons, copper kettles, beads and trinkets. Not even the straggling Algonquins, who linger about the scene of Huron prosperity, can tell their origin. Yet, on ancient worm-eaten pages, between covers of begrimed parchment, the daily life of this ruined community, its firesides, its festivals, its funeral rites, are painted with a minute and vivid fidelity.

"The ancient country of the Hurons is now the northern and eastern portion of Simcoe County, Canada West, and is embraced within the peninsula formed by the Nottawassaga and Matchedash Bays of Lake Huron, the River Severn and Lake Simcoe. Its area was small, its population comparatively large. In the year 1639 the Jesuits made an enumeration of all its villages, dwellings and families. the result showed thirty-two villages and hamlets, with seven hundred dwellings, about four thousand families, and twelve thousand adult persons, or a total population of at least twenty thousand.

"The region whose boundaries we have given was an alternation of meadows and deep forests, interlaced with footpaths leading from town to town. Of these towns some were fortified, but the greater number were open and defenceless. They were of a construction common to all tribes of Iroquois lineage, and peculiar to them. Nothing similar exists at the present day. They covered a space of from one to ten acres, the dwellings clustering together with little or no pretension to order. In general, these singular structures were about thirty or thirty-five feet in length, breadth and height; but many were much larger, and a few were of prodigious length. In some of the villages there were dwellings two hundred and forty feet long, though in breadth and height they did not much exceed the others.

* Parkman.

In shape they were much like an arbor overarching a garden walk. Their frame was of tall and strong saplings, planted in a double row to form the two sides of the house, bent till they met, and lashed together at the top. To these other poles were bound transversely, and the whole was covered with large sheets of the bark of the oak, elm, spruce, or white cedar, overlapping like the shingles of a roof, upon which, for their better security, split poles were made fast with cords of linden bark. At the crown of the arch, along the entire length of the house an opening a foot wide was left for the admission of light and the escape of smoke. At each end was a close porch of similar construction; and here were stowed casks of bark, filled with smoked fish, Indian corn, and other stores not liable to injury from frost. Within, on both sides, were wide scaffolds, four feet from the floor, and extending the entire length of the house, like the seats of a colossal omnibus. These were formed of thick sheets of bark, supported by posts and transverse poles, and covered with mats and skins. Here, in summer, was the sleeping place of the inmates, and the space beneath served for storage of their firewood. The fires were on the ground, in a line down the middle of the house. Each sufficed for two families, who, in winter, slept closely packed around them. Above, just under the vaulted roof, were a great number of poles, like the perches of a hen roost, and here were suspended weapons, clothing, skins and ornaments. Here, too, in harvest time, the squaws hung the ears of unshelled corn, till the rude abode, through all its length, seemed decked with a golden tapestry. In general, however, its only lining was a thick coating of soot from the smoke of fires with neither draught, chimney nor window. So pungent was the smoke that it produced inflammation of the eyes, attended in old age with frequent blindness. Another annoyance was the fleas; and a third, the unbridled and unruly children. Privacy there was none. The house was one chamber, sometimes lodging more than twenty families.

"He who entered on a winter night beheld a strange spectacle: the vista of fires lighting the smoky concave; the bronzed groups encircling each,—cooking, eating, gambling, or amusing themselves with idle badinage; shrivelled squaws, hideous with three-score years of hardship; grisly old warriors, scarred with Iroquois war clubs; young aspirants whose honours were yet to be won; damsels gay with ochre and wampum; restless children pell mell with restless dogs. Now a tongue of resinous flame painted each wild figure in vivid light; now the fitful gleam expired, and the group vanished from sight, as their nation has vanished from history.

"The fortified towns of the Hurons were all on the side exposed to Iroquois incursions. The fortifications of all this family of tribes were, like their dwellings, in essential points alike. A situation was chosen favourable to defence,—the bank of a lake, the crown of a difficult hill, or a high point of land in the fork of confluent rivers. A ditch, several feet deep, was dug around the village, and the earth thrown up on the inside. Trees were then felled by an alternate process of burning and hacking the burnt part with stone hatchets, and by similar means were cut into lengths to form palisades. These were planted on the embankment, in one, two, three or four concentric rows,—those of each row inclining towards those of the other rows until they intersected. The whole was lined within, to the height of a man, with heavy sheets of bark; and at the top, where the palisades crossed, was a gallery of timber for the defenders, together with wooden gutters, by which streams of water could be poured down on fires kindled by the enemy. Magazines of stones, and rude ladders for mounting the rampart, completed the

provision for defence. The forts of the Iroquois were stronger and more elaborate than those of the Hurons; and to this day large districts in New York are marked with frequent remains of their ditches and embankments.

"Among these tribes there was no individual ownership of land, but each family had for the time exclusive right to as much as it saw fit to cultivate. The clearing process—a most toilsome one—consisted of hacking off branches, piling them together with brushwood around the foot of the standing trunks, and setting fire to the whole. The squaws, working with their hoes of wood and bone among the charred stumps, sowed their corn, beans, pumpkins, tobacco, sunflowers, and Huron hemp. No manure was used; but, at intervals of from ten to thirty years, when the soil was exhausted, and firewood distant, the village was abandoned and a new one built.

"There was little game in the Huron country; and here, as among the Iroquois, the staple of food was Indian corn, cooked without salt in a variety of forms, each more odious than the last. Venison was a luxury found only at feasts; dog flesh was in high esteem; and in some of the towns captive bears were fattened for festive occasions. These tribes were far less improvident than the roving Algonquins, and stores of provision were laid up against a season of want. Their main stock of corn was buried in *caches*, or deep holes in the earth, either within or without the houses.

"In respect to the arts of life, all these stationary tribes were in advance of the wandering hunters of the North. The women made a species of earthen pot for cooking, but these were supplanted by the copper kettles of the French traders. They wove rush mats with no little skill. They spun twine from hemp, by the primitive process of rolling it on their thighs; and of this twine they made nets. They extracted oil from fish and from the seeds of the sunflower,—the latter, apparently, only for the purposes of the toilet. They pounded their maize in huge mortars of wood, hollowed by alternate burnings and scrapings. Their stone axes, spear and arrow heads, and bone fish hooks, were fast giving place to the iron of the French; but they had not laid aside their shields of raw bison hide, or of wood overlaid with plaited and twisted thongs of skin. They still used, too, their primitive breastplates and greaves of twigs interwoven with cordage. The masterpiece of Huron handiwork, however, was the birch canoe, in the construction of which the Algonquins were no less skilful. The Iroquois, in the absence of the birch, were forced to use the bark of the elm, which was greatly inferior, both in lightness and strength. Of pipes, than which nothing more important in their eyes, the Hurons made a great variety, some of baked clay, others of various kinds of stone, carved by the men, during their long periods of monotonous leisure, often with great skill and ingenuity. But their most mysterious fabric was wampum. This was at once their currency, their ornament, their pen, ink, and parchment; and its use was by no means confined to tribes of the Iroquois stock. It consisted of elongated beads, white and purple, made from the inner part of certain shells. It is not easy to conceive how, with their rude implements, the Indians contrived to shape and perforate this intractable material. The art soon fell into disuse, however, for wampum better than their own was brought them by the traders, besides abundant imitations in glass and porcelain. Strung into necklaces, or wrought into collars, belts and bracelets, it was the favorite decoration of the Indian girls at festivals and dances. It served also a graver purpose. No compact, no speech, or clause of a speech, to the representative of another nation, had any force, unless confirmed by the delivery of a string or belt of wampum. The belts,

on occasions of importance, were wrought into significant devices, suggestive of the substance of the compact or speech, and designed as aids to memory. To one or more old men of the nation was assigned the honourable, but very onerous, charge of keepers of the wampum,—in other words, of the national records; and it was for them to remember and interpret the meaning of the belts. The figures on wampum belts were, for the most part, simply mnemonic. So also were those carved on wooden tablets, or painted on bark and skin, to preserve in memory the songs of war, hunting, or magic. The Hurons had, however, in common with other tribes, a system of rude pictures and arbitrary signs, by which they could convey to each other, with tolerable precision, information touching the ordinary subjects of Indian interest.

“Their dress was chiefly of skins, cured with smoke after the well-known Indian mode. That of the women, according to the Jesuits, was more modest than that “of our most pious ladies of France.” The young girls on festal occasions must be excepted from this commendation, as they wore merely a kilt from the waist to the knee, besides the wampum decorations of the breast and arms. Their long, black hair, gathered behind the neck, was decorated with discs of native copper, or gay pendants made in France, and now occasionally unearthed in numbers from their graves. The men, in summer, were nearly naked,—those of a kindred tribe wholly so, with the sole exception of their moccasins. In winter they were clad in tunics and leggings of skin, and at all seasons, on occasions of ceremony, were wrapped from head to foot in robes of beaver or otter furs, sometimes of the greatest value. On the inner side, these robes were decorated with painted figures and devices, or embroidered with the dyed quills of the Canada hedge-hog. In this art of embroidery, however, the Hurons were equalled or surpassed by some of the Algonquin tribes. They wore their hair after a variety of grotesque and startling fashions. With some, it was loose on one side, and tight braided on the other; with others, close shaved, leaving one or more long and cherished locks; while, with others again, it bristled in a ridge across the crown, like the back of a hyena. When in full dress, they were painted with ochre, white clay, soot, and the red juice of certain berries. They practiced tattooing, sometimes covering the whole body with indelible devices. When of such extent, the process was very severe; and though no murmur escaped the sufferer, he sometimes died from its effects.

“Female life among the Hurons had no bright side. Marriage existed among them, and polygamy was exceptional. Once a mother, and married with a reasonable permanency, the Huron woman became a drudge. In March and April she gathered the year’s supply of firewood. Then came sowing, tilling, and harvesting, smoking fish, dressing skins, making cordage and clothing, preparing food. On the march it was she who bore the burden; for in the words of Champlain, “their women were their mules.” The natural effect followed. In every Huron town were shrivelled hags, hideous and despised, who, in vindictiveness, ferocity, and cruelty, far exceeded the men.

“To the men fell the task of building the houses, and making weapons, pipes, and canoes. For the rest, their home life was a life of leisure and amusement. The summer and autumn were their seasons of serious employment,—of war, hunting, fishing and trade. There was an established system of traffic between the Hurons and the Algonquins of the Ottawa and Lake Nipissing; the Hurons exchanging wampum, fishing nets and corn for fish and furs. From various relics found in their graves, it may be inferred that they also traded with tribes far

southward, towards the Gulf of Mexico. Each branch of traffic was the monopoly of the family or clan by whom it was opened. They might, if they could, punish interlopers, by stripping them of all they possessed, unless the latter had succeeded in reaching home with the fruits of their trade,—in which case the outraged monopolists had no further right of redress, and could not attempt it without a breaking of the public peace, and exposure to the authorized vengeance of the other party. Their fisheries, too, were regulated by customs having the force of laws. These pursuits, with their hunting,—in which they were aided by a wolfish breed of dogs unable to bark,—consumed the autumn and early winter; but before the new year the greater part of the men were gathered in their villages.

“Their feasts and dances were of various character, social, medical and mystical or religious. Some of their feasts were on a scale of extravagant profusion. A vain or ambitious host threw all his substance into one entertainment, inviting the whole village, and perhaps several neighbouring villages also. In the winter of 1635 there was a feast at the village of Contarreia, where thirty kettles were on the fires, and twenty deer and four bear were served up. The invitation was simple. The messenger addressed the desired guest with the concise summons, “Come and eat”; and to refuse was a grave offence. He took his dish and spoon, and repaired to the scene of festivity. Each, as he entered, greeted his host with the guttural ejaculation, *Ho!* and ranged himself with the rest, squatted on the earthen floor or on the platform along the sides of the house. The kettles were slung over the fires in the midst. First, there was a long prelude of lugubrious singing. Then the host, who took no share in the feast, proclaimed in a loud voice the contents of each kettle in turn, and at each announcement the company responded in unison, *Ho!* The attendant squaws filled with their ladles the bowls of all the guests. There was talking, laughing, jesting, singing, and smoking; and at times the entertainment was protracted through the day.”

ARCHÆOLOGICAL EVIDENCE AS DETERMINED BY METHOD AND SELECTION.*

BY HARLAN I. SMITH, DOMINION ARCHÆOLOGIST.

Archæological evidence, particularly such as is contained in specimens and illustrations, is, no doubt, often handled in such a way that it is very misleading as a basis for the reconstruction of prehistoric ethnology. This is, of course, not because of any conscious attempt to mislead but because of the particular methods of making the collections, and, in some cases, because of the practical selection of illustrations.

A collection made by a farmer's boy differs from one made by a man trained in archæological technique; one obtained by excavation from another collected from the surface. The collection gathered by a connoisseur differs from the collection made by the scientist who endeavors to obtain, in an unprejudiced and disinterested manner, the evidence, the whole evidence, and nothing but the evidence.

Archæological material, being necessarily fragmentary, readily lends itself to misleading reconstruction. The selection of unique specimens for exhibition in a museum or for illustration, side by side with common objects, leads to misunder-

*Adapted from Mr. Smith's article in the *American Anthropologist*, 1911.

standing unless the label or the text is carefully read. A unique specimen may be a sport, and single finds must be considered as possibly unique until duplicated. Collections from single or special sites may also be misleading.

A collection such as is made by a farmer's boy from the surface of the ground, for instance in the Grand River Valley, will probably contain many arrow points chipped from stone, a few celts pecked from stone, some grooved axes, and perhaps a perforated slate tablet, with but few other objects. One made by an experienced archæologist from the surface in the same region will also include fragments of pottery. The average farmer's boy discards these because they are broken, or because he does not recognize the potsherds as objects of human handiwork. Sometimes he even believes them to be pieces of petrified bark.

If the archæologist makes his collection, not only from the surface, but also by excavating into such places as mounds, graves and village sites, his collection will contain relatively few arrow points, celts, grooved axes, and the like. It will include a large number and a great variety of objects made of bone, many of antler, and not a few of shell. There will also be fragments of pottery. The reason that a collection made from the surface by both the boy and the archæologist, contains proportionately more arrow points than the one made by the archæologist in excavating, is no doubt partly because these objects are more easily seen on the surface of a field which has been washed by the rains of a season than they are in an excavation where they are partly covered with earth dust. The reason that the objects of bone, antler, and shell are found in excavating is that in the ground they are protected from the sun and rain. Such of them as have been left upon the surface or are brought to the surface by the burrowing of animals, the cultivation of fields, and the like, are soon cracked by the sun and frost, broken by the tread of man and beast, and finally wholly disintegrated. Possibly such objects are more easily discovered in the excavations than the arrow points, because of their average lighter color. Celts and grooved axes are probably rare in the excavations, because they are relatively rare everywhere, and they are found in undue proportion on the surface because there all, or nearly all, the objects of bone, antler, and shell have been eliminated.

The collection gathered by a lover of specimens as such often contains art treasures, objects made of precious or semi-precious material, unique, ceremonial or mysterious things. Usually there are few or no examples of raw materials, objects in process of manufacture, broken or repaired artifacts, or the common things which are more illustrative of the life of the prehistoric people under investigation than are the "gems" or monstrosities of the collection.

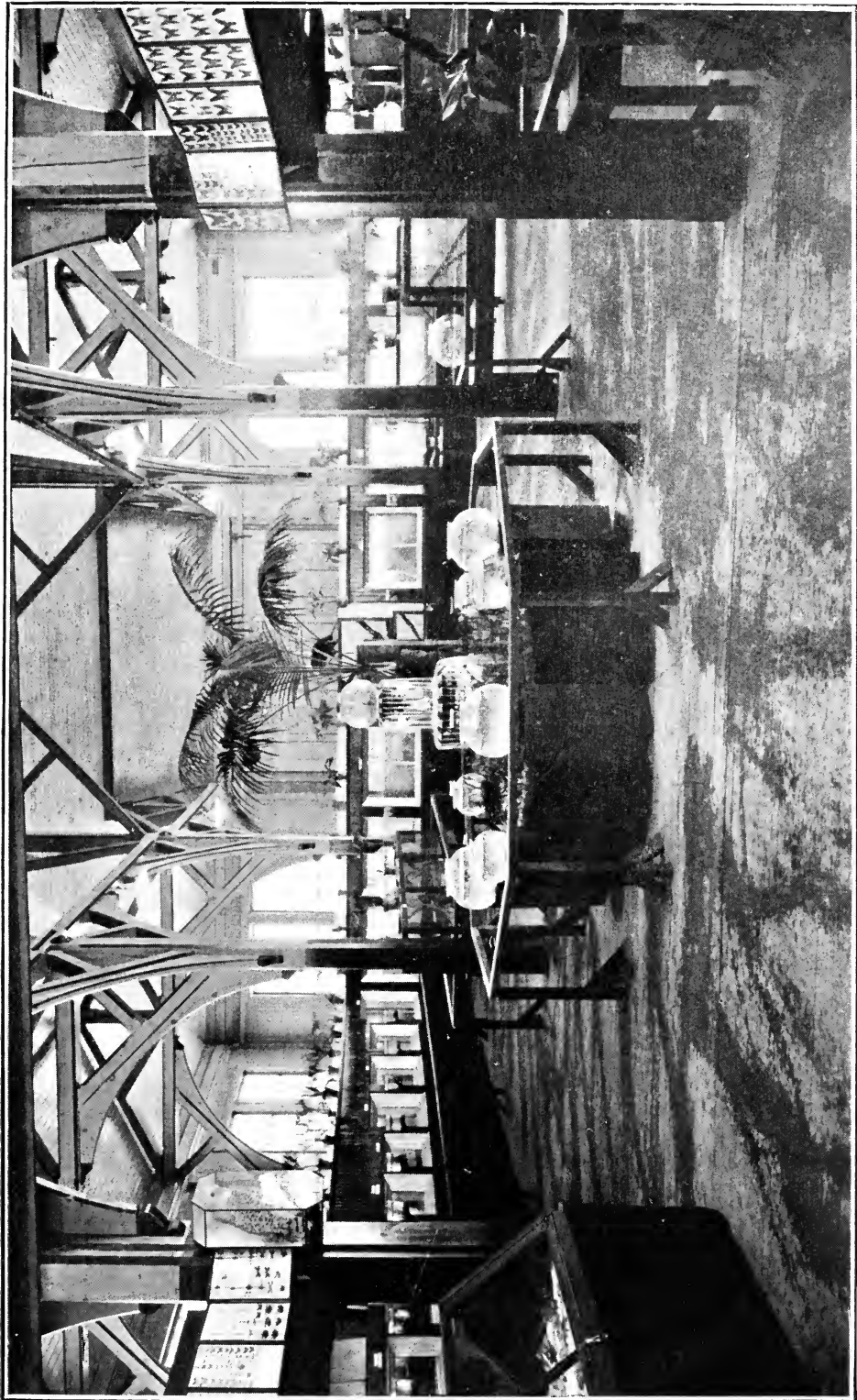
The collection made by a scientist should be obtained with an endeavour to understand the whole life of the people, and in it the unique pieces, perhaps formerly owned by a chief or shaman, bear a true relation in numbers to the common manufactures of the whole people. Such a collection may be likened to a merchant's store of goods after he has taken his inventory and replenished his stock by filling up the gaps. Even this collection sometimes falls short for at least two reasons. The archæologist, being human, often runs into a rut and, becoming unconscious of his special interests, collects certain things at the expense of others. Moreover, he is able to obtain only those things which do not disintegrate, and many of these require laborious repairing and restoration. These remnants must always fail to present evidence as satisfactorily as a collection from a living people, none of whose manufactures are as yet decayed, and whose physique, language, and philosophy are all available for study.

The illustrations of archaeological objects, such as are published in a report where an endeavor is made to show all the forms of a region, give a false impression as to their relative abundance. A unique specimen, of course, must be figured, whereas there is no need of going to the expense of figuring duplicates of the more common objects, although several specimens may be used to show the range of size and individual variations. Nevertheless, a unique object has a visual presentation far greater than its relative abundance warrants. This is a practical problem due to the expense of making and printing illustrations. Any false idea gained by glancing at the illustrations and neglecting the text can be corrected only by carefully reading the latter.

The same general idea holds good in regard to museum exhibits. There is a practical difficulty in the way of exhibiting a very great number of exact duplicates. No one would retire a unique specimen, although exhibited together with only three or four common specimens, for fear that it would give the impression that there was one of these to every three or four of the others, even though the real proportion might be one to ten thousand. There are practical reasons for the method of selecting illustrations and specimens for exhibition, but in carrying on investigation one must also take into consideration facts not shown by the museum exhibits or the illustrations.

A unique specimen may be the single great production of a great artist, or it may be only the offspring of an idle moment, made without serious consideration and perhaps by an abnormal individual, a mere freak, unworthy of consideration in the study of native craftsmanship. If, in making a collection in the field, we are satisfied to end our search for each kind of object as soon as one example is secured, it will never be known whether such an object is the common everyday tool of the people, or a freak, or again the unique product of a master hand.

A collection from a single or peculiar site may lead to an entirely erroneous conclusion if one is satisfied with the results obtained in this one kind of place. For instance, objects from a grave—which may be that of a man, a woman, or an infant—may be both characteristic only of grave finds, not typical of the whole culture of the people, and also peculiar to males, females, or infants, as the case may be. Again, collections from the part of a village site near the water do not permit us to generalize with regard to the life of the people. The objects found in such a peculiar site may have been the property of a certain peculiar type of individual—a potter, metal worker, or shaman—or of a class of individuals—fishermen, women, or children. It may be that the children always played in that part of the village, and that these objects were used only by the children. A collection made a few miles away might give one a widely different impression of the same material culture. A collection from one of our own fishing villages would give one idea of American life; another from a rural village, even if only a short distance away, would give an entirely different conception of the culture of our people as a whole. By keeping these, among many other points, constantly in mind, the archæologist may contribute much more in reconstructing prehistoric ethnology than otherwise would be the case, and his contributions will become by no means unimportant in a study of the laws governing human development.



NATURAL HISTORY EXHIBIT, C.N.E.

ADDITIONS TO THE MUSEUM, 1908.

- 28579—Feather Stole or Ruff, Northern India. Mrs. E. A. Jouffret, Toronto.
 28580—Copper Axe. N.E. part of Oaxaca State, Mexico. John Jefferson.
 28581—Copper, supposed to have been money. N.E. part of Oaxaca State, Mexico. John Jefferson.
 28582—French Iron Tomahawk. Low water mark, Sturgeon Point. Opposite Dr. Allan's residence. Mr. F. D. Moore, Lindsay, Ont.
 28583—Spindle Whorl. West half Lot 2, Con. 3, Fenelon Tp. F. D. Moore, Lindsay.
 28584—Spindle Whorl. West half Lot 2, Con. 3, Fenelon Tp. F. D. Moore, Lindsay.
 28585—Spindle Whorl. West half Lot 2, Con. 3, Fenelon Tp. F. D. Moore, Lindsay.
 28586—Quartzite Knife, Seven Islands. Opposite Anticosti. F. D. Moore, Lindsay.
 28587—Stone Gouge, near Minden, Haliburton Co. F. D. Moore, Lindsay, Ont.
 28588—Pointed Stone, near Minden, Haliburton Co. F. D. Moore, Lindsay, Ont.
 28589—Pointed Stone, near Minden, Haliburton Co. F. D. Moore, Lindsay, Ont.
 28590—4—Flints, Lot 9, Con. 3, Smith Tp., Peterboro' Co. F. D. Moore, Lindsay, Ont.
 28595—8—Flints or Chippings, Bobcaygeon Island. F. D. Moore, Lindsay, Ont.
 28599—604—Flints and Chippings, Jacob's Island, Pigeon Lake. F. D. Moore, Lindsay, Ontario.
 28605—Spear Head, Washburn Island, Scugog Lake. F. D. Moore, Lindsay, Ont.
 28606—Arrow Head, Washburn Island, Scugog Lake. F. D. Moore, Lindsay, Ont.
 28607—11—Sheet Copper Arrow Heads, from a grave on Chemong Lake, at Bridgenorth. F. D. Moore, Lindsay, Ont.
 28612—Native Copper Arrow Head, from a grave on Chemong Lake, at Bridgenorth. F. D. Moore, Lindsay, Ont.
 28613—Iron Arrow Head, from grave on Chemong Lake, at Bridgenorth. F. D. Moore, Lindsay, Ont.
 28614—Silver Brooch, from a grave on Chemong Lake, at Bridgenorth. F. D. Moore, Lindsay, Ont.
 28615—Clay Pipe Bowl, E. end, W. half of Lot 2, Con. 3, Fenelon Tp. Mr. Moore.
 28616—Part of Clay Pipe Bowl, E. end, W. half, Lot 2, Con. 3, Fenelon Tp. Mr. Moore.
 28617—Part of Clay Pipe Bowl, E. end, W. half, Lot 2, Con. 3, Fenelon Tp. Mr. Moore.
 28618—Part of Clay Pipe Bowl, E. end, W. half, Lot 2, Con. 3, Fenelon Tp. Mr. Moore.
 28619—Part of Clay Pipe Bowl, E. end, W. half, Lot 2, Con. 3, Fenelon Tp. Mr. Moore.
 28620—Part of Clay Pipe Bowl, E. end, W. half, Lot 2, Con. 3, Fenelon Tp. Mr. Moore.
 28621—30—Broken Clay Pipe Stems, E. end, W. half of Lot 2, Con. 3, Fenelon Tp.
 28631—Hammer Stone.
 28632—3—Bone Beads, W. half Lot 2, Con. 3, Fenelon Tp. F. D. Moore, Lindsay, Ont.
 28634—9—Bone Awls, W. half Lot 2, Con. 3, Fenelon Tp. F. D. Moore, Lindsay, Ont.
 28640—32 Bones, Teeth, etc., W. half Lot 2, Con. 3, Fenelon Tp. F. D. Moore, Lindsay, Ontario.

BY EXCHANGE FROM PROF. W. K. MOOREHEAD, 1908.

- 28641—Clay Pot, near Moundville, Hale Co., Ala., U.S.A.
 28642—Clay Pot, near Moundville, Hale Co., Ala., U.S.A.
 28643—Clay Pot, near Moundville, Hale Co., Ala., U.S.A.
 28644—Clay Pot, Byran Co., Georgia, U.S.A.
 28645—Clay Pot, near Moundville, Hale Co., Ala., U.S.A.
 28646—Clay Pot, Franklin Co., Fla., U.S.A.
 28647—Clay Pot, Duval Co., Fla., U.S.A.
 28648—Clay Pot, Duval Co., Fla., U.S.A.
 28649—Clay Pot, Duval Co., Fla., U.S.A.
 28650—Clay Pot, Duval Co., Fla., U.S.A.
 28651—Clay Pot, Duval Co., Fla., U.S.A.
 28652—Clay Pot, Duval Co., Fla., U.S.A.
 28653—Clay Pot, Jackson Co., Fla., U.S.A.
 28654—Clay Pot, Houston Co., Ala., U.S.A.
 28655—Clay Pot, Hale Co., Ala., U.S.A.
 28656—Clay Pot, Duval Co., Fla., U.S.A.
 28657—Clay Pot, Duval Co., Fla., U.S.A.
 28658—Clay Pot, Hale Co., Ala., U.S.A.
 28659—Clay Pot, Washington Co., Fla., U.S.A.
 28660—Clay Pot, Boulder River, near Farmington, N. Mex.
 28661—Clay Pot, Duval Co., Fla., U.S.A.

- 28662—Clay Pot, Duval Co., Fla., U.S.A.
- 28663—Clay Pot, near Moundville, Hale Co., Ala., U.S.A.
- 28664—Small Stone Disc, Moundville, Hale Co., Ala., U.S.A.
- 28665—Small Stone Disc, Moundville, Hale Co., Ala., U.S.A.
- 28666—Small Stone Disc, Moundville, Hale Co., Ala., U.S.A.
- 28667—Small Stone Disc, Moundville, Hale Co., Ala., U.S.A.
- 28668—Small Stone Disc, Moundville, Hale Co., Ala., U.S.A.
- 28669—Clay Disc, Moundville, Hale Co., U.S.A.
- 28670—28709—Flints, Jacob's Cavern, Mo., U.S.A.
- 28710—Beaded Saddle, Cree Res., near Battleford, Sask.
- 28711—Water Color of Igorottes, by Gordon V. Usburn.
- 28712—Water Color of Igorottes, by Gordon V. Usburn.
- 28713—Water Color of Igorottes, by Gordon V. Usburn.
- 28714—Water Color of Igorottes, by Gordon V. Usburn.
- 28715—Zulu woman, laying on the ground (photo) Charles Soady.
- 28716—Group of Zulu women and children (photo) Charles Soady.
- 28717—Two Zulu women (photo), Charles Soady.

ETHNOLOGICAL FIGURES, ILLUSTRATING THE MANNERS AND CUSTOMS AND
COSTUMES OF THE PEOPLE OF BENGAL, INDIA, PROCURED FROM
MR. T. P. STEWART, CALCUTTA, INDIA.

- 28718—Religious Musician (Buddha) India.
- 28719—Policeman (Chowhidar) Bengal, India.
- 28720—Coachman, Calcutta, India.
- 28721—Coolie woman, Bengal, India.
- 28722—Palanquin carried by Bengal Coolies, Baboo (Native Clerk) inside.
- 28723—Mshalji (low caste) Mahomedan, India.
- 28724—Kabulee, India.
- 28725—Drummer (Tom-tom Wallah), India.
- 28726—Groom (Syce), India.
- 28727—Butler (Khanshama), India.
- 28728—Grass Cutter, Bengal, India.
- 28729—Fisherwoman, Bengal, India.
- 28730—Village hut (Koty), Bengal, India.
- 28731—Washerwoman (Dhboie), Bengal, India.
- 28732—Farmer with Plow, Bengal, India.
- 28733—Religious beggar woman (high caste), India.
- 28734—Post runner.
- 28735—Musician, Afghanistan, India.
- 28736—Fisherman, Bengal, India.
- 28737—Valet (Bearah), India.
- 28738—Cook (Babogee), India.
- 28739—Smith shop, India.
- 28740—Coolie Woman, Bengal, India.
- 28741—Ox Cart (Hakri), Calcutta, India.
- 28742—Tike-tike, or ceremonial tool (adze) used by natives of Polynesia. Gift of John Taylor.
- 28743—Objects from a grave in Manitoulin Island, procured from Mrs. A. Sagima, Killarney, Ont.
- 28744—Eskimo Pipe, Fort McPherson, McKenzie River. H. Prichard.
- 28745—Glass Beads, Lots 15 and 16 Dorchester Farm, Queenston Heights. St. David's, Ont., David Boyle.
- 28746—Glass Beads, Dorchester Farm, Queenston Heights. St. David's, Ont., David Boyle.
- 28747—Shell Beads (Wampum), Dorchester Farm, Queenston Heights. St. David's, Ont., David Boyle.
- 28748—Shell Beads (Wampum), Dorchester Farm, Queenston Heights. St. David's, Ont., David Boyle.
- 28749—Shell Beads (Wampum), Dorchester Farm, Queenston Heights. St. David's, Ont., David Boyle.
- 28750—Shell Beads (Wampum), Dorchester Farm, Queenston Heights. St. David's, Ont., David Boyle.
- 28751—Busyson, Perversum, Dorchester Farm, Queenston Heights. St. David's, Ont., David Boyle.

- 28752—Busyson, Perversum, Dorchester Farm, Queenston Heights. St. David's, Ont., David Boyle.
- 28753—Portion of large shell used in making Wampum, Dorchester Farm, Queenston Heights. St. David's, Ont., David Boyle.
- 28754—Part of shell, personal ornament, Dorchester Farm, Queenston Heights. St. David's, Ont., David Boyle.
- 28755—Shell Gorget, Lots 15 and 16, Dorchester Farm, Queenston Heights. St. David's, Ont., David Boyle.
- 28756—Shell Gorget, Lots 15 and 16, Dorchester Farm, Queenston Heights. St. David's, Ont., David Boyle.
- 28757—Brass Vessel, Lots 15 and 16, Dorchester Farm, Queenston Heights. St. David's, Ont., David Boyle.
- 28758—Brass Vessel, Lots 15 and 16, Dorchester Farm, Queenston Heights. St. David's, Ont., David Boyle.
- 28759—Clay Vessel, Lots 15 and 16, Dorchester Farm, Queenston Heights. St. David's, Ont., David Boyle.
- 28760—Clay Vessel, Lots 15 and 16, Dorchester Farm, Queenston Heights. St. David's, Ont., David Boyle.
- 28761—Fragment of Clay Vessel, Dorchester Farm, Queenston Heights. St. David's, Ont., David Boyle.
- 28762—Carved Bone (Patella), Dorchester Farm, Queenston Heights. St. David's, Ont., David Boyle.
- 28763—Skull, Dorchester Farm, Queenston Heights. St. David's Ont., David Boyle.
- 28764—Skull, Dorchester Farm, Queenston Heights. St. David's Ont., David Boyle.
- 28765—Skull, Dorchester Farm, Queenston Heights. St. David's Ont., David Boyle.
- 28766—Skull, Dorchester Farm, Queenston Heights. St. David's Ont., David Boyle.
- 28767—Skull, Dorchester Farm, Queenston Heights. St. David's Ont., David Boyle.
- 28768—Skull, Dorchester Farm, Queenston Heights. St. David's Ont., David Boyle.
- 28769—Skull, Dorchester Farm, Queenston Heights. St. David's Ont., David Boyle.
- 28770—Fragment of Skull, Dorchester Farm, Queenston Heights. St. David's, Ont., David Boyle.
- 28771—Copper Implement, Dorchester Farm, Queenston Heights. St. David's, Ont., David Boyle.
- 28772—Carib Shell Awl, Strong Hope, St. Thomas, Barbados. Pres. by J. W. Roach.
- 28773—Carib Shell Chisel, Strong Hope, St. Thomas, Barbados. Pres. by J. W. Roach.
- 28774—Carib Shell Chisel, Strong Hope, St. Thomas, Barbados. Pres. by J. W. Roach.
- 28775—Carib Shell Chisel. Presented by Rev. J. R. Nicholls, Sec. Ed. Board, Barbados.
- 28776—Carib Shell Chisel. Presented by Rev. H. Hutson, Rector of St. Lucia, Barbados.
- 28777—Carib Shell Chisel. C. N. C. Roach, Mullins, St. Peter, Barbados.
- 28778—Carib Shell Chisel. C. N. C. Roach, Mullins, St. Peter, Barbados.
- 28779—Carib Shell Chisel. C. N. C. Roach, Mullins, St. Peter, Barbados.
- 28780—Celt, or Axe. W. Cork, Kingston, Jamaica.
- 28781—Celt, or Axe. W. Cork, Kingston, Jamaica.
- 28782—Imperfect Stone Axe, Grand River Res. Procured from Jacob Hess.
- 28783—Imperfect Stone Axe, Grand River Res. Procured from Jacob Hess.
- 28784—Flute, Grand River Res. Procured from Jacob Hess.
- 28785—Silver Brooch, Grand River Res. Procured from Jacob Hess.
- 28786—Silver Brooch, Grand River Res. Procured from Jacob Hess.
- 28787—Silver Brooch, Grand River Res. Procured from Jacob Hess.
- 28788—Silver Brooch, Grand River Res. Procured from Jacob Hess.
- 28789—Pair Silver Earrings, Grand River Res. Procured from Jacob Hess.
- 28790—Arrow Head, Grand River Res. Procured from Jacob Hess.
- 28791—Clay Basin, Hyde Expedition, Zuna Indian, New Mexico. F. D. Moore.

FROM NO. 28792—30593, PROCURED FROM WILLIAM MURRAY, AND WERE
COLLECTED IN KENT AND ELGIN COUNTIES.

- 28792—Stone Axe.
- 28793—Stone Axe.
- 28794—Stone Hammer
- 28795—Stone Axe.
- 28796—Stone Axe.
- 28797—Stone Axe.
- 28798—Stone Axe.
- 28799—Stone Axe.

- 28800—Stone Axe.
- 28801—Stone Axe.
- 28802—Stone Axe.
- 28803—Stone Axe.
- 28804—28812—Stone Axes.
- 28813—Stone Semi Gouge.
- 28814—28819—Stone Axes.
- 28820—Stone Gouge.
- 28821—Shallow Stone Gouge.
- 28822—28824—Stone Axes.
- 28825—Stone Axe or Hammer.
- 28826—7—Stone Axe or Hammer.
- 28828—Stone Semi Gouge.
- 28829—28841—Stone Axes.
- 28842—44—Grooved Stone Axes.
- 28845—Edge-grooved Stone Axe.
- 28846—Grooved Stone Axe.
- 28847—Unfinished Grooved Stone Hammer.
- 28848—Grooved Stone Axe.
- 28849—28873—Stone Axes.
- 28874—Stone Gouge.
- 28875—99 Stone Axes.
- 28900—28928—Stone Axes.
- 28929—35—Stone Chisels.
- 28936—Stone Axe or Chisel.
- 28937—38—Stone Axes.
- 28939—Stone Axe or Hammer.
- 28940—Fragment of Stone Axe.
- 28941—28979—Stone Axes.
- 28980—Fragment of Stone Axe.
- 28981—91—Stone Axes.
- 28992—Stone Chisel.
- 28993—4—Stone Axes.
- 28995—6—Stone Chisels.
- 28997—8—Stone Axes.
- 28999—Stone Axe or Chisel.
- 29000—29003—Stone Axes.
- 29004—Rubbing Stone.
- 29005—29037—Stone Axes.
- 29038—29040—Stone Axes or Chisels.
- 29041—Stone Gouge.
- 29042—29065—Stone Axes.
- 29066—Stone Chisel.
- 29067—29074—Stone Axes.
- 29075—29077—Stone Chisels.
- 29078—Stone Axe or Chisel.
- 29079—Stone Axe.
- 29080—Stone Axe or Chisel.
- 29081—Stone Axe.
- 29082—3—Stone Gouges.
- 29084—87—Iron Tomahawks.
- 29088—Tinder Steel.
- 29089—29118—Fragments of Pottery.
- 29119—20—Hammer Stones.
- 29121—Paint Stone.
- 29122—Hammer Stone.
- 29123—Water-worn Stone.
- 29124—Stone Chisel.
- 29125—28—Fragments of Clay Pipes.
- 29129—30—Clay Pipes.
- 29131—39—Fragments of Clay Pipes.
- 29140—Shell Gorget.
- 29141—Bone Chisel.
- 29142—Antler of Young Deer.
- 29143—56—Bone Awls or Needles.
- 29157—Bone Bead.
- 29158—Bone Awl or Needle.

- 29159—29169—Imperfect Gorgets.
- 29170—Woman's Knife.
- 29171—75—Imperfect Gorgets.
- 29176—83—Bird Amulets.
- 29184—Part of Bird Amulet.
- 29185—Part of Bird Amulet.
- 29186—Imperfect Butterfly Stone.
- 29187—Ceremonial Stone.
- 29188—93—Butterfly Stones.
- 29194—Banner Stone.
- 29195—6—Gorgets.
- 29197—8—Butterfly Stones.
- 29199—Banner Stone.
- 29200—2—Gorgets.
- 29203—Ceremonial Stone.
- 29204—Ceremonial Stone.
- 29205—Unfinished Gorget
- 29206—29215—Gorgets.
- 29216—Ceremonial Stone.
- 29217—Gorget.
- 29218—Ceremonial Stone.
- 29219—Ceremonial Stone.
- 29220—Part of Painted Banner Stone.
- 29221—Part of Painted Banner Stone. rebored.
- 29222—Ceremonial Stone.
- 29223—Grooved Tube.
- 29224—Short Tube.
- 29225—Tube.
- 29226—Tube.
- 29227—Imperfect Tube.
- 29228—29231—Tubes.
- 29232—Unfinished Tube.
- 29233—Small Amulet.
- 29234—Imperfect Tube.
- 29235—End of a Stone Tube.
- 29236—Ceremonial Stone.
- 29237—Crenated Gorget.
- 29237 1-2—Unfinished Banner Stone.
- 29238—Crenated Gorget.
- 29239—Fish-shaped Water-worn Stone.
- 29240—Ice Chisel.
- 29241—Eel-shaped Stone.
- 29242—Canoe-shaped Stone.
- 29243—Bar Amulet.
- 29244—Bar Amulet.
- 29245—Bar Amulet.
- 29246—Bar Amulet.
- 29247—Bar or Fish-shaped Amulet.
- 29248—Water-worn Stone, partly worked.
- 29249—Stone Tomahawk Pipe.
- 29250—55—Stone Pipes.
- 29256—Sandstone Pipe Head.
- 29257—N.-West Pipe.
- 29258—Gorget.
- 29259—62—Scrapers.
- 29263—Adze.
- 29264—77—Gorgets.
- 29278—(Crenated edge) Gorget.
- 29279—Gorget.
- 29280—Gorget.
- 29281—89—Gorgets.
- 29290—Catlinite Pipe.
- 29291—Catlinite Pipe.
- 29292—Spear Head (Iron).
- 29293—Bayonet.
- 29293 1-2—Copper Spear-head.

- 29294—30593—Arrow Heads, Spear Heads, Flints, Scrapers, etc.
 30594—Iroq. Indian Dance Mask, Tuscarora Reserve. Jacob Hess.
 30595—Clay Pipe, found on farm of John Spence, Jr., Lake Shore, near Hybla, Mont-eagle Tp., Hastings Co., Ont. Gift of John Spence.

FROM NO. 30596—30694, BY EXCHANGE WITH THE AMERICAN MUSEUM OF
 NATURAL HISTORY.

- 30596—Two Charred Corncobs. Fox farm, May's Lick, Mason Co., Kentucky.
 30597—Hammer Stone, showing action of fire
 30598—Broken Piece of Celt.
 30599—Celt.
 30600—Chipped Disk.
 30601—Fragment of Pottery.
 30602—Fragment of Pottery.
 30603—Portion of Rim of Pot.
 30604—5 Fragments of Pottery (rims).
 30605—Disc of Stone, with central perforation.
 30606—Fragment of Pottery.
 30607—Fragment of Pottery.
 30608—Fragment of Pottery, bearing handle.
 30609—2 Fragments of Pottery (rims).
 30610—Fragment of Pottery.
 30611—2 Fragments of Pottery.
 30612—Fragment of Pottery with two scallops in rim above handle.
 30613—Fragment of Pottery.
 30614—Fragment of Pottery.
 30615—Fragment of Pottery, bearing handle
 30616—2 Fragments of Pottery (rims).
 30617—Fragments of Pottery.
 30618—Shell-Unio.
 30619—Hammer Stone.
 30620—Fragment of Pottery.
 30621—Fragment of Pottery.
 30622—Fragment of Pottery.
 30623—Fragment of Pottery, bearing handle.
 30624—Fragment of Pottery.
 30625—Disc of Stone, with central perforations.
 30626—Grit Stone, with groove for sharpening.
 30627—Piece of Turtle Shell.
 30628—Black Bear Tooth.
 30629—Ulna of Deer.
 30630—Vertebra of Deer.
 30631—Whole Apicina Marginella Beads, from right arm of skeleton.
 30632—Stone Disc.
 30633—Tibia of Male Wild Turkey.
 30634—Ulna of Small Mammal.
 30635—Metacarpal of Deer.
 30636—Piece of Deer Antler.
 30637—2 pieces of Scrapers. Tarsal Bones of Deer.
 30638—2 Antler Tips (arrow or spear-points).
 30639—Spatulate-shaped Implement of bone.
 30640—Bone of Animal.
 30641—Tooth of Deer.
 30642—Arrow or Spear-head.
 30643—Lower Jawbone, Black Bear.
 30644—Canine Tooth, small carnivoræ, perforated pendant.
 30645—Bone.
 30646—Bone Awl. Tarsa metatarsus of deer.
 30647—Bone Awl.
 30648—Fragment, flute similar to one tube of a Pan pipe.
 30649—Fragment of Perforated Pottery.
 30650—Disc-shaped Pebble.
 30651—Bone of Deer.
 30652—Astragalus Bone of Deer.
 30653—Celt or Scraper, made of deer antler.

- 30654—Shell-Unio.
- 30655—Tip of Deer Antler.
- 30656—Bone Awl, Tibia, Wild Turkey.
- 30657—Bone Awl, upper end Tibia, Wild Turkey.
- 30658—Canine Tooth, Black Bear.
- 30659—Arrow or Spear-head, flint.
- 30660—Deer Bone.
- 30661—Arrow-head, flint.
- 30662—Awl, from Ulna of Deer.
- 30663—Awl, from Ulna of Deer.
- 30664—Awl, from Tarsa Metatarsus of Wild Turkey.
- 30665—Canine Tooth of Mammal.
- 30666—Bone Tube or Bead.
- 30667—Fragment of Pottery.
- 30668—Perforated Shell Disc.
- 30669—Perforated Disc of Stone.
- 30670—Claw or Tooth-shaped, Coal or Shale Pendant.
- 30671—Charred Corn, found with skeleton.
- 30672—Olive Shell, from neck of skeleton.
- 30673—Broken Awl or Bone.
- 30674—Piece of Elk Antler.
- 30675—Shell-Unio.
- 30676—Lower Jaw of Woodchuck.
- 30677—Tooth of Deer, perforated for pendant.
- 30678—Tablet or Stick, cut from bone.
- 30679—Bone Bead or Tube.
- 30680—Fragment of Pottery.
- 30681—Shell-Unio.
- 30682—Awl, made from deer ulna.
- 30683—Bone of a Deer.
- 30684—2 Antler Tips, Deer.
- 30685—Part of Deer Antler.
- 30686—Bone Cylinder.
- 30687—Penis Bone of Raccoon.
- 30688—Disc of Stone.
- 30689—Bone Awl, or Perforator.
- 30690—Bone Tube.
- 30691—Lower Jawbone, Deer.
- 30692—10 Cylindrical Shell Beads.
- 30693—Arrow Point.

ADDITIONS TO THE MUSEUM, 1909.

- 30695—Rug, made by the natives of Figi. Presented by Mrs. Wilson C. Eddis, to whom it was given by a son of the King, Thakombau, at Suva, in May, 1894.
- 30696—Skull. Dug up about 20 years ago, on Smith St. (now Riverdale Ave.). Presented to the late Louis Kribbs, of the Empire, and remained over his office door till the amalgamation of the paper with the Daily Mail, when it was given to Sol. Cassidy, by one of the Empire staff. Presented by Sol. Cassidy.
- 30697—Unborn Buffalo Skin. This is known by the Indians as a "tea bag," and is used by them to carry a supply of tea while on their travels or hunting expeditions. It is the skin of a Buffalo calf whose mother was killed before the calf was born. It was brought to the North-West Territory from Dakota directly after the Minn. Massacre, in 1862, by the wife of "Thin Moose," an Indian belonging to "Standing Buffalo's" band of Sioux Indians, and has been in the possession of the donor, Mr. W. R. Tucker, for 20 years. Mr. Tucker, now of Toronto, has held the position of Instructor on "White Caps" Sioux Reserve, Moose Woods, for the past 20 years.
- 30698—Native Basket, Trinidad, W. I. Gift of Pickford and Black.
- 30699—Clay Pot, Trinidad, W. I. Gift of Pickford and Black.
- 30700—Catacou Basket, Antiqua, W. I. Gift of Pickford and Black.
- 30701—Native Baking Dish, Antiqua, W. I. Gift of Pickford and Black.
- 30702—Native Basket, Antiqua, W. I. Gift of Pickford and Black.
- 30703—Lobster Trap, Antiqua, W. I. Gift of Pickford and Black.

30704—Clay Pipe, Herbert Tamley's Farm, Lot 10, Con. 5, Gwillimbury Tp.
30705—6—Spear Heads, East Gwillimbury.
30707—Arrow Head.
30708—Spear Head (Markhall's Farm).
30709—Unfinished Knife (Markhall's Farm).
30710—Gorget, Peter Ferguson's Farm, Warwick Tp.
30711—Spear Head (Wm. Morris's Farm, Warwick Tp.).
30712—Flint Knife (Wm. Morris's Farm, Warwick Tp.).
30713—Arrow Point. No locality.

30714—Native Whip, Central Chili.
30715—Native Whip, Central Chili.
30716—Native Hide Softener.
30717—Native Grass Rope, "Maul," made from Stalks of Sedge, which grows on the banks of streams.
30718—Native Grass Rope Lasso.
30719—Native Hair Rope Lasso, made of horse hair.
30720—Native Rawhide Lasso.
30721—Native Bridle and Strap, sewn with rawhide.
30722—Native Saddle "Chilla," bound with rawhide.
30723—Native Hobbles, used on horses' front feet.
30724—Native Spindle Whorl "Huso."
30725—Native Spindle Whorl "Cidoi."
30726—Native Sieve for sifting flour, sheepskin.
30727—Native Drinking Horn.
30728—9—Native Dinner or Call Horns.
30730—1—Native Wooden Plates.
30732—Native Mortar "Mortero", for pulverizing spices.
30733—4—Native Wooden Ladles or Spoons.
30735—Native Wooden Stool.
30736—Native Hair Brush, made of sedge, and bound with rawhide.
30737—Native Basket.
30738—Native Basket "Kulks," for carrying all burdens.
30739—Native Adze "Maichiauw" used for making wooden plates or bowls.
30740—Native Basket Work Plate.
30741—3—Native Clay Jugs.
30744—5—Native Hockey Sticks, Indian national game "Chueka."
30746—7—Native Hockey Balls, Indian national game "Chueka."
30748—9—Native Musical Instruments.
30750—1—Native Knots tied on trees. If the tree dies soon, the person who ties it, dies quickly; if it lives, they will live also.
30752—3—Native Bamboo Spears.
30754—Beaver Chips, North Hastings. Dr. A. B. Cook.
30755—Gouge, Lot 28, Con. 16, Dunganon Tp., Hastings Co. Wm. Maxuree.
30756—7—Crescents. "Cast." { 30756—Windor Tp., Eaton Co., Michigan.
 { 30757—Shawnee Co.
 { Chas. N. Fuller, Grand Ledge, Mich.
30758—Iron Knife, used by the Indians, and found at Tessier, Sask. Sep. Latrace Tessier, Sask.

30758a—Buffalo Skull, North-West, 1883. P. Nicolle, 88 Shaftesbury Ave., Toronto.

30759—30764—GIFT OF MR. JAMES McPHERSON, JANUARY 23rd. 1911.

- 30759—Pestle. Found by Henry Leaybourn, on Lot 23, Con. 7, Melancthon Tp., Dufferin Co.
30760—Flint. Found by Alfred Johnson, on Lot 30, Con. 11, Proton Tp., Grey Co.
30761—Flint. Found by James McPherson, on Lot 40, Con. 10, Proton Tp., Grey Co.

- 30762—Flint. Found by James McPherson, on Lot 40, Con. 10, Proton Tp., Grey Co.
30763—Stone Pipe. Found by Walter McPherson, on Lot 39, Con. 9, Proton Tp., Grey Co.
30764—Stone Axe or Adze. James Leaybourn, on Lot 23, Con. 7, Melancthon Tp., Dufferin Co.
30765—Iron Spear, Scugog Lake. Gift of Fred. Birch.
30766—Pipe, Dorchester Tp. On Mr. Birch's farm, between London and Ingersoll.
30767—Stone Implement, Dorchester Tp. Gift of Fred. Birch.

30768—30786—GIFT OF MR. JAS. IRVINE, HAMILTON, ONT.

- 30768—30771—Arrow Heads, Mass. State, U.S.A.
30772—30775—Arrow Heads, Oklahoma State, U.S.A.
30776—Vegetable Ivory, Brazil, South America.
30777—30780—Arrow Heads, Ohio State, U.S.A.
30781—30782—Arrow Heads, Oklahoma State, U.S.A.
30783—Arrow Heads, Kansas State, U.S.A.
30784—86—Arrow Heads, Fort Ancient, Ohio, U.S.A.

30787—31213—SMELSER-ORR COLLECTION.

- 30787—94 Foot Bones (ground down), Vaughan Tp. Dr. R. B. Orr.
30795—30823—Bone Beads, Vaughan Tp. Dr. R. B. Orr.
30824—Fragment of Bone Comb, Vaughan Tp. Dr. R. B. Orr.
30825—Fragment of Bone, Pendant, Vaughan Tp. Dr. R. B. Orr.
30826—Unfinished Bone Bead (flat), Vaughan Tp. Dr. R. B. Orr.
30827—30832—Bone, Vaughan Tp. Dr. R. B. Orr.
30833—30835—Awls or Chisels (Antler), Vaughan Tp. Dr. R. B. Orr.
30836—30837—Parts of Deer Antler, Vaughan Tp. Dr. R. B. Orr.
30838—30866—Bone Awls, Vaughan Tp. Dr. R. B. Orr.
30867—30868—Bone Needles, Vaughan Tp. Dr. R. B. Orr.
30869—Tooth (Pendant), Vaughan Tp. Dr. R. B. Orr.
30870—Shell (Pendant), Vaughan Tp. Dr. R. B. Orr.
30871—Bone Awl, Vaughan Tp. Dr. R. B. Orr.
30872—30876—Stone Pipes, Vaughan Tp. Dr. R. B. Orr.
30877—30878—Fragments of Stone Pipes, Vaughan Tp. Dr. R. B. Orr.
30879—30880—Stone Pipes, Vaughan Tp. Dr. R. B. Orr.
30881—30882—Unfinished Stone Pipes, Vaughan Tp. Dr. R. B. Orr.
30883—30886—Fragments of Pottery, Vaughan Tp. Dr. R. B. Orr.
30887—Gorget, Vaughan Tp. Dr. R. B. Orr.
30888—Unfinished Gorget, Vaughan Tp. Dr. R. B. Orr.
30889—Chisel or Scraper (made from horn), Vaughan Tp. Dr. R. B. Orr.
30890—Spear Head, Vaughan Tp. Dr. R. B. Orr.
30891—30899—Arrow or Spear Heads, Vaughan Tp. Dr. R. B. Orr.
30900—30913—Arrow Heads, Vaughan Tp. Dr. R. B. Orr.
30914—Spear Head, Vaughan Tp. Dr. R. B. Orr.
30915—30918—Clay Pipes, Vaughan Tp. Dr. R. B. Orr.
30919—30936—Bowls of Clay Pipes, Vaughan Tp. Dr. R. B. Orr.
30937—30947—Bowls of Clay Pipes, Vaughan Tp. Dr. R. B. Orr.
30948—30993—Stems of Clay Pipes, Vaughan Tp. Dr. R. B. Orr.
30994—31008—Fragments of Stone Adzes and Chisels, Vaughan Tp. Dr. R. B. Orr.
31009—Stone Tool or Implement (small), Vaughan Tp. Dr. R. B. Orr.
31010—31012—Scrapers, Vaughan Tp. Dr. R. B. Orr.
31013—Shell Wampum, Vaughan Tp. Dr. R. B. Orr.
31014—Stone Tube, Vaughan Tp. Dr. R. B. Orr.
31015—Ceremonial Stone, Vaughan Tp. Dr. R. B. Orr.
31016—31018—Water-worn Stones, Vaughan Tp. Dr. R. B. Orr.
31019—31022—Stone Beads or Pendants, Vaughan Tp. Dr. R. B. Orr.
31023—Round Stone (partly worked), Vaughan Tp. Dr. R. B. Orr.
31024—Fossil, worked to the shape of a heart, Vaughan Tp. Dr. R. B. Orr.
(*Heliophyllum Colligatum*).
31025—Bird Amulet, Gwillimbury Tp. Dr. R. B. Orr.
31026—Clay Pipe, Gwillimbury Tp. Dr. R. B. Orr.
31027—31028—Hammar Stones, Vaughan Tp. Jos. Smelser.
31029—Fragment of Pottery, Vaughan Tp. Jos. Smelser.
31030—31034—Stems of Clay Pipes, Vaughan Tp. Jos. Smelser.
31035—31040—Bowls of Clay Pipes, Vaughan Tp. Jos. Smelser.
31041—31042—Clay Pipes, Vaughan Tp. Jos. Smelser.
31043—31044—Stone Pipes, Vaughan Tp. Jos. Smelser.

- 31045—Bird Amulet, Vaughan Tp. Jos. Smelser.
 31046—Fragment of Bird Amulet, Vaughan Tp. Jos. Smelser.
 31047—31048—Parts of a Banner Stone, Vaughan Tp. Jos. Smelser.
 31049—Stone Tube, Vaughan Tp. Jos. Smelser.
 31050—Rubbing or Polishing Stone, Vaughan Tp. Jos. Smelser.
 31051—Copper Arrow or Spear Point, Vaughan Tp. Jos. Smelser.
 31052—Ceremonial Stone, Vaughan Tp. Jos. Smelser.
 31053—Partly-worked Stone, Vaughan Tp. Jos. Smelser.
 31054—Stone Gouge, Vaughan Tp. Jos. Smelser.
 31055—31058—Stone Chisels, Vaughan Tp. Jos. Smelser.
 31059—31061—Stone Adzes, Vaughan Tp. Jos. Smelser.
 31062—31080—Stone Adzes or Axes, Vaughan Tp. Jos. Smelser.
 31081—Long Stone Implement, Vaughan Tp. Jos. Smelser.
 31082—31097—Bone Awls, Vaughan Tp. Jos. Smelser.
 31098—31099—Bone Needles, Vaughan Tp. Jos. Smelser.
 31100—31101—Deer Antlers, Vaughan Tp. Jos. Smelser.
 31102—Chisel (bone), Vaughan Tp. Jos. Smelser.
 31103—Chisel (antler), Vaughan Tp. Jos. Smelser.
 31104—Bone Spear Point, Vaughan Tp. Jos. Smelser.
 31105—Bone Spear or Arrow Head, Vaughan Tp. Jos. Smelser.
 31106—31110—Teeth (Bear). “ “ “ “
 31111—Tooth (Beaver). “ “ “ “
 31112—31120—Foot Bones. “ “ “ “
 31121—Wampum (Shell). “ “ “ “
 31122—31152—Bone Beads. “ “ “ “
 31153—Bead (Shell). “ “ “ “
 31154—31157—Fragments of bone. “ “ “ “
 31158—31160—Shells. “ “ “ “
 31161—Tooth. “ “ “ “
 31162—Piece of bone or rawhide, bent at a right angle, Vaughan Tp. Jos. Smelser.
 31163—31213—Arrow Heads, Vaughan Tp. Jos. Smelser.
 31214—31231—Carib Shell Implements, Barbados, W. I. C. N. C. Roach.
 31232—31234—Fragment of Conch Shell. “ “ “ “
 31235—Barnacle, taken from a whale “ “ “ “
 31236—31245—Shell Carib Implements, Barbados, W. I. By exchange. Rev. T. Huckerby.
 31246—31247—Fragments of Conch Shell, Barbados, W. I. By exchange. Rev. Thomas Huckerby.
 31248—31253—Stone Carib Implements, St. Vincent, W. I. By exchange, Rev. Thos. Huckerby.
 31254—Stone Carib Implement, Mustique, W. I. By exchange, Rev. Thos. Huckerby.
 31255—31259—Stones, St. Vincent, W. I. By exchange, Rev. Thos. Huckerby.
 31260—Fragment of Bone Ornament, Innisfail Tp. Procured from Harry Mayor.
 31261—Wampum (Shell). “ “ “ “
 31262—31263—Teeth. “ “ “ “
 31264—31265—Bone Awls or Chisels. “ “ “ “
 31266—31276—Bone Awls. “ “ “ “
 31277—Awl (Horn). “ “ “ “
 31278—31279—Fragments of bone. “ “ “ “
 31280—Beaded Leg Band “ “ “ “
 31281—Bone Ornament. “ “ “ “
 31282—31283—Stone Pipes “ “ “ “
 31284—Copper Tube or Bead. “ “ “ “
 31285—Gorget. “ “ “ “
 31286—Part of a Bird Amulet. “ “ “ “
 31287—31288—Spear Heads (Stone). “ “ “ “
 31289—Scraper. “ “ “ “
 31290—31294—Arrow Heads. “ “ “ “
 31295—31310—Clay Pipe Bowls. “ “ “ “
 31311—31312—Clay Pipes. “ “ “ “
 31313—31314—Pipe Stems. “ “ “ “
 31315—Stone Tool. “ “ “ “
 31316—Skull. “ “ “ “
 31317—Stone Gouge. “ “ “ “
 31318—31322—Stone Axes. “ “ “ “
 31323—31324—Stone Chisels. “ “ “ “
 31325—Mealing Stone. “ “ “ “
 31326—31327—Discoidal Stones. “ “ “ “
 31328—Oval-shaped Stone. “ “ “ “

- 31329—Round Stone. Innisfail Tp. Procured from Harry Mayor
- 31330—31331—Sharping Stone (Sandstone) " " " "
- 31332—31333—Hammar Stones. " " " "
- 31334—Pebble Stone. " " " "
- 31335—Gambling Stone. " " " "
- 31336—A piece of stone or ore with two holes drilled in it, Innisfail Tp. Procured from Harry Mayor.
- 31337—31345—Bone Beads. Innisfail Tp. Procured from Harry Mayor.
- 31346—Axe (H. B. Co.), Porcupine, New Ontario. Fred Dane.
- 31347—Copper Pan, Porcupine, New Ontario. Fred Dane.
- 31348—31349—Stone Axes or Adzes, Pine Orchard, Ont. Miss Mary Skinner.
- 31350—Fragment of Stone Tool or Implement, Pine Orchard, Ont. Miss Mary Skinner.
- 31351—31353—Arrow Heads, Porcupine, New Ontario. Fred Dane.
- 31354—31356—Band of old flint lock gun, Porcupine, New Ontario. Fred Dane.
- 31357—Iron Implement, Porcupine, New Ontario. Fred Dane.
- 31358—Iron Axe, Porcupine, New Ontario. Fred Dane.
- 31359—Fragment of Iron Axe, Porcupine, New Ontario. Fred Dane.
- 31360—Trigger Guard of an old gun, Porcupine, New Ontario. Fred Dane.
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- 31362—31363—Skulls, Porcupine, New Ontario. Fred Dane.
- 31364—31376—Bones, Porcupine, New Ontario. Fred Dane.
- 31377—Piece of Pottery, Clarksdale, Miss. John W. Stovall, Stovall, Miss.
- 31378—31381—Glacial Rocks. Arnprior. Ont. Armon Burwash.
- 31382—Mastodon Tooth, Baby's Farm Humber River, York Co. Frank Baby, per John L. Doran, Toronto.





THE HONOURABLE ROBERT ALLEN PYNE, M.D., LL.D., M.P.P.
Minister of Education for the Province of Ontario.

Ontario Provincial Museum, 1912-5

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1912

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PRESENTATION

To the Honourable R. A. PYNE, M.D., LL.D., M.P.P., Minister of Education.

SIR,—I have the honour to herewith submit the Annual Archæological Report of the Provincial Museum for the year 1912.

The number of specimens added during the year is 732, and this number should be greatly increased during the next year through more field work, and attention to many collections throughout the Province.

Some photo-engravures have been made, illustrating the addition to the biological and osteological departments of the Museum.

I have the honour to be,

Your obedient servant,

ROWLAND B. ORR.

December 31st, 1912.

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The romance and weird fascination which belongs to immense solitudes and untenanted wilds are fading away and, in a few years, will be as if they were not. The intangible and the immaterial leave no memories after them.

“The march of civilization is a benediction for the future, but it is also a devastation before which savage nature and savage man must go down. Unable or unwilling to adapt himself to new conditions and to the demands of a life foreign to his nature and his experience original man of North America is doomed, like the wild beast he hunted, to extinction.

“For centuries he stubbornly contested the white man’s right to invade and seize upon his hunting grounds; he was no coward, and when compelled, at last, to strike a truce with his enemy, he felt that Fate was against him, yielded to the inevitable and—all was over. In the Bacatete mountains, amid the terrifying solitudes of the Sierras of Northern Mexico, the Yaquis—last of the fighting tribes—is disappearing in a lake of blood, and when he is submerged the last dread war-whoop will shriek his requiem. It will never again be heard upon the earth.

“The lonely regions of our great continent, over which there brooded for unnumbered ages the silence which was before creation, are disappearing with the vanishing Indian; a new vegetable and a new animal life are supplanting the old now on the road to obliteration. The ruin is pathetic, but inevitable.

“DEAN HARRIS, ‘By Path and Trail.’”





DRESS OF AN ALGONQUIN WOMAN
James Bay, New Ontario

NEW ONTARIO

THE ALGONQUINS

The name Algonquin is said to mean "the place where they spear fish," *i.e.*, the front of the canoe. Other philologists insist that the proper interpretation of the word is "the man on the other side of the river," namely, the St. Lawrence.

Of the region they inhabited in this Province, the opinions of the far-seeing Schoolcraft as expressed in his great work published about three-quarters of a century ago, can now be fully appreciated by every citizen of this great Dominion.

He said, "If ever there was a country on the face of the earth, which, by a figurative use of language, deserves to be called a land flowing with milk and honey, it is the sixfold basin of the great American lakes, extending from the foot of Lake Ontario to the head of Lake Superior, together with a region draining much of the highlands separating them from the water of Hudson's Bay."

Who anticipated that in so short a space of time so much could be accomplished in this great north land of New Ontario? Commercial roads of steel now traverse her rocky coastlines and penetrate the vast areas of agricultural lands comprised within her borders, the development of which, though but in its infancy, is going ahead at a pace that is unprecedented. "The Soo," the parting place in ancient days of many Indian tribes, is now a hive of industry; and ere another half-century has passed over her historical career, Sault Ste. Marie will be as great an iron city as Pittsburg.

The first contact of white men with these vast forests and waterways of New Ontario occurred in 1615. We find Samuel de Champlain on July 9th of that year turning his course westward on the St. Lawrence river with two whites, ten Indians, and sufficient provisions—or, rather, as much as could be packed in two canoes. During the trip up the Ottawa they met many Algonquins, and at this time precautions were being taken to prevent attacks by the irrepressible Iroquois. He followed the Ottawa river to the junction of the Mattewan; thence he proceeded through Talon, Turtle, and Trout Lakes to a place a few miles south-east of North Bay. Here they were entertained by the Indians, and on the shores of Trout Lake are still to be found kitchen middens and the burial places of the Algonquin tribes occupying the territory at that time. While making his arrangements with the Algonquin tribes to assist him in his promised attack upon the Iroquois confederacy, his ultimate goal was the Hurons, from whom he was looking not only for great assistance in his attack upon the southern Indians, but also for the securing of considerable prey and profit to the merchants of New France. Previously to Champlain, Father Le Caron, a Recollet priest, with some ten Frenchmen had made their way through the same waterways as Champlain. Thus on the hills and plains of New Ontario the flag of European civilization had been planted long before Old Ontario was known. The reception given to Champlain and Father Le Caron by the various tribes on the road to Lake Nipissing was most cordial.

The Algonquin family, who then, as now, occupied that portion of this province known as New Ontario formerly covered a more extended area than any other group of Indians in North America. Their territory reached from the eastern shore of Newfoundland to the Rocky Mountains, and from Churchill River to

Pamlico Sound, in N. Carolina. On the east, Algonquin tribes skirted the Atlantic coast from Newfoundland to Neuse River; on the south, they touched on the territories of the Siouan, Iroquois and Muskogean families. Although there is a general agreement as to the peoples which should be included in this family, information in regard to the numerous dialects is too limited to justify an attempt to give a strict linguistic classification. The data are, in fact, so meagre in many instances as to leave it doubtful as to whether certain bodies were confederacies, tribes, bands or clans, especially bodies which have become extinct or cannot be identified, since early writers have frequently designated settlements or bands of the same tribe as distinct tribes.

In New Ontario we find from the earliest reports of those that visited the locality that it was settled principally by the following tribes: Ottawas, Mississaugas, Ojibways, Temiskaming, and Abittibis. Of all these tribes there are only about 95,000 left at the present day, 4,700 of whom occupy the district of New Ontario. Between Cartier's time and that of Champlain changes occurred which contributed greatly to the decline of Algonquin ascendancy. The power of the Iroquois confederacy had developed so marvellously as to become a scourge to the other Indian nations; and when they turned their power against the Algonquin tribes, after subduing the Hurons and Attawandarins, they drove them into the fastnesses of the North. And now we find that nearly all of the Indians on the reserves in New Ontario are of Algonquin stock and are but remnants of the once powerful confederacy of which they are descendants.

They were a fine race of men, tall in person, averaging in weight about 173 cm.; nose heavy and prominent, somewhat hooked in men, flatter in women. They were active hunters, brave and expert warriors, good orators, and shrewd counsellors, and spoke a language at once soft and sonorous.

The Algonquin tribes probably equalled the Iroquois in bravery, intelligence, and physical powers, but lacked their constancy, solidity of character, and capability of organization. In fact they did not appear from the early records to have had any strong or lasting bond of unity amongst them. Their political organization was very loose. They had a general council with vague and limited powers. In this council, which was controlled by social custom, was vested the government, such as it was. Some of their chiefs were able men politically and had been successful leaders of war parties. The question of justice was bound up with social custom, which regulated the clan. Their property rights were vaguely defined. There were some things which came under personal possession, such as wearing apparel, badges of decoration, weapons and various contrivances used in cooking, and snow-shoes and dogs, which were both the means of travelling and obtaining food. The cooking of food and the preparing of game killed by the hunter was done by the women. In the highest latitudes occupied by the Algonquins, on and north of the Lake Superior basin, we search in vain for any striking objects of antiquity.

As he yet lingers on his once sacred hunting grounds in this great province, and gazes on the growing creation of a modern civilization, to-day's representative of the Algonquins may well query whether in all this display of rapid prosperity there is any hope of permanency for his race, or will it in time become merged into the other races which occupy this country?

History is clear as to the unity of origin of the Ojibways and Ottawas, and other allied tribes, while it fails to inform us why "Chippawa" was frequently used instead of "Ojibway." The Nipissingo, also written Nipissiriniens, were supposed to be the basis of all these tribes. This was a term applied to the people

who lived on the banks of Lake Nipissing, at the source of French River, on the north shores of Lake Huron. This lake, lying on summit-lands, occupies the line of the portage between Lake Huron and the great "Outawas" river, and was the route of communication, and for the transportation of merchandise, from Hochelaga to the great upper lake basins, and to the uttermost regions of the West. This route avoided altogether the hostile Iroquois country, by way of Niagara; and was, at the same time, by far the nearest. It may well be noted here that at the present time every effort is being made to revive this waterway by building a succession of canals connecting Montreal via the Ottawa River with North Bay and the cities and towns of the Upper Lakes.

The Algonquin tribes were mainly sedentary and agricultural, perhaps the exception being those of the cold regions of New Ontario, where they made extensive use of the wild rice which grows in the shallows of many of their lakes. They were also extensive hunters of fish and game. Their fish were taken with hooks, spears, and nets; in canoes and along the shore; on the lakes, ponds and rivers. They captured without much trouble all the smaller kind of fish and, in canoes, often dragged sturgeon with nets. Canoes used for fishing were of two kinds—one of birch bark, very light, but liable to upset; the other made from the trunk of a large tree. They fished extensively in the winter time with nets, their methods being very much the same as the present time. With great blows of an axe, generally made from an elk's horn, they made a tolerably large hole in the ice of the pond; then at intervals they made other smaller ones and by the use of poles they passed a cord from hole to hole under the ice. This cord, which was as long as the nets they wish to stretch, stopped at the last hole, through which it was drawn and they spread out in the water the whole net which was attached to it. That is the way they spread the nets the first time. When they wished to examine them it was very easily done, for they drew them out through the largest opening to collect the fish from them, then it was only necessary to draw back the cord, re-spread the nets, the poles serving merely to put the cord through the first time.

Eels were extensively used for food—the women preparing and drying them. In preparing they opened the eel up the back and washed very carefully; they then suspended them on poles outside their huts to drain, and gashed them in a number of places in order that the smoke might dry them more easily.

The Indians were very fond of Sagamite. The word "Sagamiteon" in the Algonquin language means water or warm gruel. It afterwards was extended in its meaning to signify all sorts of soups, broths, and similar foods. The corn was pounded in their mortars into meal, then was boiled in water with the addition of meat, fish, or oil, when they had such, to enrich and flavour it. Various kinds of vegetables in their season, rice, beans, peas, pumpkins, were boiled with the corn.

In their social life, it is true, they were very patient; but order is maintained in their occupations, and peace preserved in their households by not merely the women knowing what to do, but the men also; and one never interferes with the work of the other. The men made the frames of their canoes, and the women sewed the bark with willow withes or similar small wood. Men went hunting and killed the animals, the women following skinned them and cleaned the hides; and they also gathered the wood that was burned. In fact, they would make fun of a man who, except in great necessity, would do anything that should be done by a woman.

Their clothing was composed chiefly of the skins of animals, tanned until soft and pliable, and was sometimes ornamented with paint and beads made of shells.

Occasionally they decked themselves with mantles made of feathers overlapping each other as on the back of a fowl. The dress of the women consisted usually of two articles, a leather shirt or undergarment, ornamented with fringe, and a skirt of the same material, fastened round the waist with a belt and reaching nearly to the feet. The legs were protected, especially in the winter, with leggings, and the feet with mocassins of soft dressed leather, often embroidered with wampum.

There is little in the conditions of the hunter state of man that can be dignified with the name of monument. Tribes, who rely on the bow and arrow for their means of subsistence; who cultivate the earth by loosening the soil with the scapula of a stag or a flint spade; who are completely erratic in their habits and customs; and who put up, as a shelter from the elements, buildings of the slightest and most perishable materials, cannot be expected to have left very extensive or striking monumental traces of their past history. This will be found to be the case, in a peculiar manner, it is apprehended, with the antiquarian remains of the branch of the human race who formerly inhabited the area of New Ontario. The most antique things in it appear to be the people themselves. They are the greatest wonder that New Ontario has produced, except her silver mines.

These tribes roved through vast forests, of which they can hardly be said to have had a fixed occupancy. They were cut up into many petty independencies, perpetually quarrelling with each other, which did not remain stationary long enough to organize governments capable of commanding labour on public works. To waylay an enemy, to shake his scalp in the air, to follow the tracks of a deer or a bear, to brandish the war-club in the dance—these were esteemed greater achievements among them, than to erect a column or inscribe a shaft. We are only surprised that they should have left anything, in the line of antiquities, but the small and naked fields which they tilled.

The antiquity of the Algonquin race is wrapped, more or less, in the mystery which shrouds the origin of all other great tribal organizations in this country. In the course of centuries they must have revolved curiously, making almost the entire circuit of the continent north of Mexico and east of the Rockies. Nor can we conceive that, in so long an epoch as they have taken to occupy so much territory, fewer discrepancies and changes of language should have occurred. There is no reason whatever to believe that the Algonquin group of tribes, as assimilated by language, came from more northerly points to the Nipissing summit. The parent language, varying as it progressed, appears to have been propagated from the south and south-west to the Virginia, the Chesapeake, and the Pennsylvania coast; and it was thence deflected off, multiplying in dialects exceedingly, towards the east and *north-east*, along the north Atlantic, and finally it extended north-west up the St. Lawrence valley into the region of New Ontario.

The French, in 1608, found a people speaking the same generic language on the north banks of the St. Lawrence, between Three Rivers and the site of Quebec. They found the same race, at quickly successive periods, at Lake Nipissing, at the head of the Ottawa River, and dwelling around the basins of Lake Superior, Huron, Michigan, and a part of Erie. The French missionaries called them "Algonkins" and the term came into popular use.

As the science of man becomes broader and deeper more attention is being paid to the antiquity of the primitive races upon this continent. "At what epoch came he here?" "Was he born of the soil?"—are questions which may well attract the attention of students of archaeology. At one time they were regarded as rude savages, untutored and uncivilized, but to-day we find amongst the ruins of

their ancient palaces, temples and mounds, evidences of a fine order of civilization; also of a high art comparable, and in many cases identical, with that of the ancient nations of the Old World. The hieroglyphics upon their palaces and temples are being deciphered, and as time goes on we may yet know more of them than we do at present.

The Palæontological evidences bearing on the problem of the origin of the American Aborigines are numerous. That there was a land connection between the Old World and North America at the beginning of the Pleistocene, there can be no doubt, and that it existed as late as the close of the last glacial and probably well into the post-glacial epoch is also reasonably certain.

Mr. Austin H. Clark, in "The American Anthropologist," states: "That according to the evidence of biological paleography man probably reached America over the broad land that formerly existed across Behring Sea, and when he reached America this land connection became disrupted and the whole region acquired an Arctic climate. A few accidental visitors may have wandered across the Pacific from the South Sea Islands, but this could only have been after the perfection of the art of navigation by these people, and America was probably settled long before navigation or boat building had reached any advanced stage."

Homes, in speaking of their Eastern origin, says: "Even more remarkable and diversified are the correspondences between the architectural remains of Yucatan and those of Cambodia and Java in the Far East. In both regions the chief structures of the cities are pyramids ascended by four steep stairways of stone bordered by serpent balustrades and surmounted by temples which employ the offset arch and have sanctuaries, altars, tablets and glyphic inscriptions. The walls are embellished with a profusion of carved and modelled ornaments and surmounted by roof crests of elaborate design. There are present also as supports for the great stone tables and the lintels of the doorways dwarfed Atlantean figures duplicating those of the antipodal cities—some of the figures representing whiskered men." The significance of all this has been sought again and again without any satisfactory result.

From the Anglo-Israel theories of some modern writers to the Platonic theories of the Atlantean civilization there is a very wide difference; but, if we wish to trace the origin of man on this continent, we must go back far into the misty ages of the past. A hundred thousand years must have elapsed since aboriginal man first made his appearance in this part of the world. Where he came from in those past ages can only be surmised. That his place of origin was from some individual source is absurd. Europe, Asia, and Africa, with the submerged continents in both the Atlantic and Pacific Ocean all supplied their quota of material to make up the great Indian races on this continent. The diversity of languages, their great difference in general appearance, all point to a diversity of origin. From the Mongolian Inca to the tall straight athletic Algonquin, there is as much difference as between the Lascar of Madras and the Shiek of North-Western India. The evidence of negro intermixture is well illustrated by the masks found in Central America, showing that history had carried down to them accounts of the black-faced race who had once been engrafted amongst them.

Of the many tribes who occupied places in New Ontario perhaps the Ojibways and Ottawas were the most prominent, and of the descendants of the ancient Algonquin race in this territory they are to-day the principal representatives of the Ancient Aborigines.

THE OJIBWAY.

Ojibway (meaning, "to roast till puckered up," referring to the puckered seam on their mocassins; from ojob "to pucker up," up-way "to roast"). This was one of the largest tribes north of Mexico, whose range was formerly along both shores of Lake Huron and Lake Superior, extending across Minnesota to Turtle Mountains, North Dakota. Although strong in numbers and occupying an extensive territory, the Ojibways were never prominent in history, owing to their remoteness from the frontier during the period of the colonial wars. Tradition asserts that about the time of the discovery of America a large section of that portion of the Algonquin nation in the west separated into several tribes, viz., the Ojibway, Ottawa, and Pottawattomie, and occupied various territories both north and south of Lake Superior; and that about 1612 they suddenly abandoned this western locality, many of them going back to the Sault, while others settled at the west end of Lake Superior, where Father Allouez found them between 1665 and 1667. There is nothing found to sustain the statement of Warren in regard to the early residence of the tribe at La Pointe. They were first noticed in the Jesuit Relation of 1640 under the name Baouichtigonin (probably Bawa'tigowiniwug, "people of the Sault"), as residing at the Sault, and it is possible that Nicollet met them in 1634 or 1639. In 1642 they were visited by Raymbaut and Jogues, who found them at the Sault and at war with a people to the west, doubtless the Sioux. A remnant or offshoot of the tribe resided north of Lake Superior after the main body moved south to Sault Ste. Marie, or when it had reached the vicinity of the Sault. The Marameg, a tribe closely related to, if not an actual division of the Ojibway, who dwelt along the north shore of the lake, were apparently incorporated with the latter while they were at the Sault, or at any rate prior to 1670 (Jesuit Rel. 1670). On the north the Ojibway were so closely connected with the Cree and Maskegon that the three could be distinguished only by those intimately acquainted with their dialects and customs, while on the south the Ojibway, Ottawa, and Pottawattomie always formed a sort of loose confederacy, frequently designated in the last century the Three Fires. It seems to be well established that some of the Ojibway have resided north of Lake Superior from time long antedating the Mound Builders.

Schoolcraft, who was personally acquainted with the Ojibways and married a woman of the tribe, describes them as warriors equalling in physical appearance the best-formed of the north-west Indians, with the possible exception of the Foxes. Their long and successful contests with the Sioux and Foxes exhibited their bravery and determination, yet they were uniformly friendly in their relations with the French. The Ojibway were a timber people. Although they had long been in friendly relations with the whites, Christianity in the early days had but little effect on them, owing to the conservatism of the native medicine-men. It is affirmed by Warren, who is not disposed to accept any statement that tends to disparage the character of his people, that, according to tradition, the division of the tribe residing at La Pointe practised cannibalism; while Father Belcourt affirms that, although the Ojibway of Canada treated the vanquished with most horrible barbarity and at these times ate human flesh, they look upon cannibalism, except under such conditions, with horror.

Their wigwams were made of birch bark or of grass mats; poles were first planted in the ground in a circle, the tops bent together and tied, and the bark or mats thrown over them, leaving a smoke hole at the top. They imagined that the shade, after the death of the body, followed a wide beaten path, leading toward

the west, finally arriving in a country abounding in everything the Indian desires. It is a general belief among the northern Ojibway that the spirit often returns to visit the grave, so long as the body is not reduced to dust. Their creation myth is that common among the northern Algonquins. Like most other tribes they believe that a mysterious power dwells in all objects, animate and inanimate. Such objects are *manitus*, which are ever wakeful and quick to hear everything in the summer, but in winter, after snow falls, are in a torpid state. The Ojibway regarded dreams as revelations, and some object which appears therein was often chosen as a tutelary deity. The Medewiwin, or grand medicine society, was a powerful organization of the Ojibway, which controlled the movements of the tribe and was a formidable obstacle to the introduction of Christianity. When an Ojibway died it was customary to place the body in a grave facing west, often in a sitting posture; or to scoop a shallow cavity in the earth so as to form a small mound, over which boards, poles, or birch bark were placed. According to McKenney, Ojibway of Fond du Lac, Wisconsin, practised scaffold burial, the corpse being inclosed in a box. Mourning for a lost relative continued for a year, unless shortened by the *meda* or by certain exploits in war.

As the Ojibway were scattered over a region extending 1,000 miles from east to west, they had a large number of villages, bands, and local divisions. Some of the bands bore the name of the village, lake, or river near which they resided, but these were grouped under larger divisions or subtribes which occupied certain fixed limits and were distinguished by marked differences.

THE OTTAWAS.

Ottawa (from adawe, "to trade," "to buy and sell.") a term common to the Cree and Ojibway, and applied to the Ottawa because in early traditional times, and also during the historic period, they were noted among their neighbours as intertribal traders and barterers, dealing chiefly in corn-meal, sunflower oil, furs and skins, rugs or mats, tobacco, and medicinal roots and herbs. On French River, near its mouth, on Georgian Bay, Champlain in 1615 met 300 men of a tribe which, he said, "we call les cheueux releuez." Of these he said that their arms consisted only of the bow and arrow, a buckler of boiled leather, and the club; that they wore no breech-clout, and that their bodies were much tattooed in many fashions and designs; that their faces were painted in diverse colours, their noses pierced, and their ears bordered with trinkets. The chief of this band gave Champlain to understand that they had come to that place to dry huckleberries to be used in the winter when nothing else was available. In the following year Champlain left the Huron villages and visited the "Cheueux releuez" (Ottawas), living westward from the Hurons, and he said that they were very joyous at "seeing us again." This last expression seemingly shows that those whom he had met on French River in the preceding year lived where he now visited them. He found this tribe populous; the majority of the men were great warriors, hunters, and fishermen, and were governed by many chiefs who ruled each in his own district; they planted corn and other things; they went into many regions 400 or 500 leagues away to trade; they made a kind of mat which served them for Turkish rugs; the women had their bodies uncovered, saving a robe of fur like a mantle, which was worn in winter, but usually discarded in summer.

In the Jesuit Relation for 1667, Father Le Mercier, reporting Father Allouez, treated the Ottawa, Kiskakon, and Ottawa Sinago as a single tribe, because they had the same language and together formed a common town. He adds that the

Ottawas (Outaouacs) claimed that the great river (Ottawa) belonged to them, and that no other nation might navigate it without their consent. It was, for this reason, he continues, that although very different in nationality, all those who went to the French to trade bore the name Ottawa, under whose auspices the journey was undertaken. He adds that the ancient habitat of the Ottawa had been quartered on Lake Huron, whence the fear of the Iroquois drove them, and whither were borne all their belongings, as it were, to their native country. Of the Ottawa, the Father says: "They were little disposed toward the faith, for they were too much given to idolatry, superstitions, fables, polygamy, looseness of the marriage tie, and to all manner of license, which caused them to drop all native decency."

According to tradition the Ottawa, Ojibway, and Pottawattomie tribes of the Algonquin family were formerly one people who came from some point north of the great lakes and separated at Sault Ste. Marie. The Ottawa were located by the earliest writers and also by tradition on Manitoulin Island and along the north and south shores of Georgian Bay.

There is unquestioned documentary evidence that as early as 1635 a portion of the Ottawa lived on Manitoulin Island. Harassed by the Sioux, and, a promise of protection by the French having been obtained, they returned in 1670-71 to Manitoulin Island in Lake Huron. In Father Claude Allouez's trip to Lake Superior in 1664, frequent mention is made of the Ottawa, and he states that "these savages regard this lake as a divinity and offer it sacrifices, but whether it is on account of its size or because of its goodness in furnishing a supply of fish to make up for the lack of game in these parts I do not know. As you sail over its clear waters you can see far down at the bottom of the lake pieces of copper, some of these as much as ten and twenty livres in weight. The Indians keep bits of the metal about them and hand them down as precious heirlooms to their children." Allouez on this voyage was anxious to find the great rock of pure copper, which was said to have projected far out of the water, but he found it not. It may be of interest to the reader to know that this same copper rock is now in the Smithsonian Institution in Washington.

THE POTTAWATTOMIES.

The Pottawattomies have also figured in the early history of New Ontario. In the Jesuit Relations for 1641 they are spoken of as living in the vicinity of Winnebago. Verwyst says that in 1641 they were at Sault Ste. Marie. Their abiding place, like most of the Algonquin tribes was not lasting, spreading from the prairies of the great west, north through Illinois to the Sault, thence eastward to the neighbourhood of North Bay. At the present time the remnant of the tribe that is left mostly occupy reserves in the United States—those that remain in New Ontario are mixed with other bands. They were spoken of by many of the early writers as being most docile and affectionate. Their natural politeness and readiness to oblige was usually extended hospitably to strangers.

THE ABITTIBI.

The Abittibi is a little known Algonquin band whose habitat has been the shores of Abittibi Lake. The first recorded notice of them is in the Relation of 1640. It is said that the Iroquois warred upon them and two other tribes of the same locality. During the building of the branch of the Temiskaming and

Northern Ontario Railway from Iroquois Falls to Porcupine remains were found which showed evidence of Iroquois contact in this country, and many relics in the museum—presented by Mr. Fred Dane of the Temiskaming and Northern Ontario Railway—attest the Iroquois and French contact at this time—probably about 1651.

NEW MATERIAL.

During the year 1912 many new additions have been made to the archæological specimens in the Provincial Museum, and to those who have been our best friends in the past we are further indebted for liberal contributions. Lieut. Col. Geo. E. Laidlaw, Victoria Road; Clark Bros., Peterborough; James Warren, Walkerton; Dr. Barnard, Seneca, Mo., and Mrs. D. A. Jones, Beeton, County of Simcoe, have given largely during the past year. We reproduce some of the more unusual specimens from their collections.



Fig. 31919—Full size.

Figure 31919 is a stone hammer which has evidently been used very considerably as it is greatly worn. The groove around the centre, where the handle was attached, presumably by a deer hide thong, is worn very smooth. The stone is

very hard, the centre portion quite dark, perfectly smooth and well polished. This stone is of quartz—this and other material capable of the greatest amount of work with the least amount of wear—were constantly utilized by the Indians. Man living in an age of stone must have been always conversant with the best material possible and also with its adaptability for particular uses. From the appearance of this stone one would be inclined to think that it had been utilized around the camp for breaking the long bones of animals for the purpose of extracting the marrow therefrom. It is a well known fact that most of the long bones of animals found in the kitchen middens have been broken.



Fig. 32068½—Half diameter.

Stone Adze Fig. 32068½ found in the Township of West Nissouri, County of Essex, near Thorndale. This adze is beautifully made of fine coloured granite. The bevelling on the lower side of the adze is remarkably well done; the edges are square, and the front part of the adze nicely rounded. The evidence on the reverse side from that shown in the photo engraving indicates the rubbing of the material used in hafting the same.



Fig. 31311—Half size.

Figure 31311: This perfect clay pipe, bell-shaped and beautifully made, has the appearance on the surface of being glazed. Probably this may be due to other conditions as the North American Indian was unaware of the process of glazing any of his pipes, but by the use of other materials he was able to give them a smooth polish.



Fig. 31937—Full size.

Figure 31937 is a pipe made of soapstone and somewhat darkened in colour, probably from use or exposure. The drilling both of the bowl of the pipe and the stem are remarkably well done and unusually regular. It may probably have been used to smoke without a stem, but from its general appearance and from the size of the hole, it was evidently used with a wooden stem attached to it. Unlike the usual stone pipe there was no hole for the attachment of the stem thereto.



Fig. 31312—Half size.

Figure 31312: This pipe, also found in the Township of Innisfil, County of Simcoe, is so perfect a specimen of a modern clay pipe, except in colour, that one would imagine the hands of some European in modern days had made it, yet in every particular it conforms with the pipes of Pre-Columbian times. The ring markings and the dots around the top of the pipe are similar to those of many others; also the methods of making the inside of the bowl and the holes of the stem are purely Indian.



Fig. 31282—Full size.

Figure 31282: This is a stone pipe found by Mr. Harry Mayor in the Township of Innisfil. It is fairly well made. The head, which was evidently intended to represent a bear, is very good: mouth, eyes, and ears being very well exemplified. The bowl is small and cut as similar bowls are in other pipes of this kind. A number of these pipes are to be found in the Museum, a particularly good collection having been presented by Colonel Laidlaw. The hole between pipe and stem is bored similarly to the holes in the amulets and other ornaments made of stone. The paws are brought together forming a handle for the purpose of holding the pipe. At the upper part of this handle is a slight projection intended evidently to represent the fore paws of the animal.



Fig. 31922—Full size.

Figure 31922 is a gorget of striped slate made in an unusual way. The hole is a little above the centre bored in the same manner as is usual in artifacts of this kind. It may have been used for the purpose of rubbing down deer hide thongs to make snow shoes and also for use in sewing. The hole is worn sufficiently to indicate that it has been used for some utilitarian purpose. It is the only gorget of this kind in the Museum.



Fig. 31921—Full size.

Figure 31921 is a beautifully made gouge of bluish gray granite. It was found near Walkerton, in the County of Bruce, and with a number of other valuable artifacts, was presented to the Museum by James Warren, Esq., of Walkerton.

This gouge, when properly hafted, would make a very useful implement for Indian work. Evidently great care and labour were expended in fashioning such gouges and they must have been made for some important purpose. Diligent search in the "Jesuit Relations" has failed to give us any satisfactory explanation of these unique objects. No theory of the use of such artifacts as this so well explains the excellent condition in which most of them are found as does the one that they were chiefly used in excavating or cutting where wood had been more or less charred—as in the making of boats, burning the log, removing the burnt wood with a gouge, then burning again.



Fig. 31386—Full size.

Figure 31386 is an unusual shaped stone. For what uses it could be valuable is exceedingly uncertain. It may probably have been a flat stone, smoothed down into shape and then made ready for the purpose of making an amulet or some other such ornament therefrom. The fish-shaped head only indicates an article partially finished, and age has done the rest in leaving a smooth surface. While the tail is flattened, the process of finishing is incomplete.



Fig. 31923—Full size.

Figure 31923 is a nicely shaped gorget with the usual two holes made in proper form, but with lower part bell-shaped and bevelled on one side so that it is not perfectly flat. The material is slate and, as usual in pieces of this kind, is

beautifully marked. It apparently must have been used for an ornament, as it is so thin that it was not likely required for any utilitarian purpose. The love for personal adornment common to man in whatever stage of development we find him manifests itself in prehistoric times on this continent by the presence of a variety of objects of a decorative character such as the one represented:



Fig. 31257—Full size.

Figure 31257 is a stone axe from St. Vincent, West Indies, presented with a number of others by the Rev. Thos. Huckerby. We illustrate this axe for the purpose of showing the different methods of manufacturing the same between the West Indies and Canada. These axes, when properly sharpened, must have been fairly useful for the purpose for which they were intended. Of course, as far as cutting the hardwoods of the Tropics, they would be absolutely useless, but for the softer woods and cleavage purposes they were of excellent service.



Fig. 31286—Full size.

Figure 31286 may be classed amongst the bird amulets. While the head is similar to many of those in that class, the general outline closely resembles the amulets. What is intended as the head is pierced by a hole bored, similar to others of this class, at the base. Probably this hole was used for the purpose of hanging it suspended round the neck of the wearer.

Figure 2 represents a few of a cache of "Flints" accompanied by a copper hook, found at Site 20, lake shore, block east, Bexley Township, County of Victoria, May 24th, 1909, and presented to the Provincial Museum by Colonel George E. Laidlaw. Colonel Laidlaw writes as follows concerning this cache:

"This cache was found while planting trees by Mr. Joseph Lytle and Mrs. A. A. Macdonald at her summer residence. The flints consisted of about 18 or 20 irregularly shaped leaf and ovate forms from one inch to two inches in length, several blocks of flint, and about fifty large untrimmed flakes and rejects. These seem to comprise two varieties of flint, the grey chert kind, and the chalcedonic variety of a lighter colour, the latter probably coming from an outcropping in Carden Twp., some twelve miles away.

There is also one large flake of dioritic material, $2\frac{5}{8}$ in. long, $1\frac{1}{2}$ broad, partially smoothed in one place.

This cache may have been the stock-in-trade of some flint worker. It was found in very stony ground at a depth of a foot or eighteen inches. It was disturbed and partially thrown out of the hole before being noticed. Most of the flints and the hook were secured on the spot by Mrs. A. A. Macdonald. The rest were carried away, but were recovered inside of a day or so. There were no small chips noticed that would lead one to believe that there was chipping done on the spot. The cache was within a very few yards of high water mark and also near a boulder containing a mortar, on south side of site.

The copper hook is of native copper and native manufacture, length $3\frac{1}{4}$ inches, width from point to shank $1\frac{3}{4}$ inches, weight $1\frac{1}{2}$ oz. avoirdupois. The shank is $\frac{3}{8}$ inch wide by $\frac{1}{4}$ inch thick in cross section, and was probably made into a spike—first of $6\frac{1}{2}$ inches in length, and then bent into hook shape, similar to the present Limerick style. It may have possibly been used as a gaff hook, as it is too large for an ordinary fishing hook. This is the first flint cache on record from this section.

Soapstone pipe, found by myself on Site 3, Lot 5, Con. 5, Bexley Township, is one of the "everyday" class, and though small and plain, is of a unique shape that



Fig. 2—Full size.

has not been recorded before. It is $1\frac{3}{4}$ inches long, three sided and tapering to a small base at bottom; width of sides at top 1 inch, at bottom $\frac{3}{8}$ inch, triangular cross section with outside angles rubbed down. The three angles project slightly above the bowl. The bowl has been made by excavating, and also by use of a rotatory drill, both sorts of marks being shown. Depth of bowl hole $1\frac{3}{8}$ inches. There are two stem holes—a not uncommon feature in this section, the smaller one entering through one angle at about $\frac{3}{8}$ inch from the base, the larger stem hole nearly



Fig. 31081.

opposite and higher up. Diameter of bowl $11/16$ inches; of stem holes $3/16$ and $1/4$ inches respectively. The faces show abundant marks of rubbing with a sandstone, the striae not being regular enough to have been produced by a steel file. There is a transverse nick on each of the two corners near the top, use of which is problematical.

Glassy quartz arrowhead, $2\frac{1}{2}$ inches long, $11/16$ wide, $3/8$ thick, this was found on Lot 10, N. P. R., Eldon, Bolsover P.O., and given by Mr. James McGirr. This arrowhead is mentioned on account of the material it is made from, it being an almost transparent glassy quartz. Several rough scrapers made from the same material have been found in this locality.

Figure 31081 is a very fine specimen of a slate pick. It is 14 inches long and measures 4 inches in circumference at its centre. The markings show that it had been hafted and without doubt been used for the purpose of breaking the ice. It was found by the late Joseph Smelser on Lot 2, Con. 5, King, on the banks of the little Humber and most probably was used for ice-breaking by the villages occupying the Humber in ancient days.

POTTERY.

The importance of the potter's art to archæology has often been pointed out. Baked clay is one of the most enduring materials utilized in art, and its employment by the races of men has fallen but little short of universal. The creations of that noblest of arts—architecture and the antecedent forms of house building—are necessarily left where erected to be fed upon by the remorseless elements of nature, but the less pretentious utensil of clay accompanies its owner to the tomb, where it remains practically unchanged for ages. And many of our glimpses of the history of the American races of Pre-Columbian times are obtained through these relics.

These pieces of pottery are in the Laidlaw Collection, and were found on Lots 5 and 6, Con. 2, Township of Beverley, County of Victoria. The markings on some of these pieces are particularly well executed and, considering that probably four or more centuries have passed since they were used, their condition is remarkable; and when in a finished state, uncorroded by time, they must have presented a very elegant appearance. No potter's wheel was used in their manufacture. Sometimes baskets were woven and the clay was moulded on, but most frequently they were made by hand.





These four pieces of pottery, namely: Figures 31468, 31469, 31477, and 31483 were found by Clark Bros. in the Township of N. Dumfries, County of Waterloo. The markings, while somewhat different from the Laidlaw collections, which were probably manufactured by Algonquins, are without doubt of Attawandarin origin. While the markings may be on the general pattern of other Indian pottery, yet the work on those of the Laidlaw collection is much superior to that of the Clark collection.



Fig. 31469.



Fig. 31468.

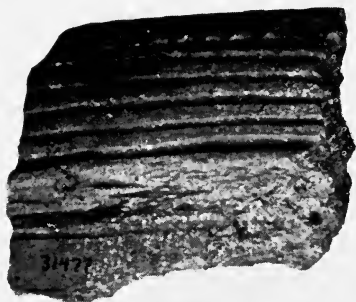


Fig. 31477.

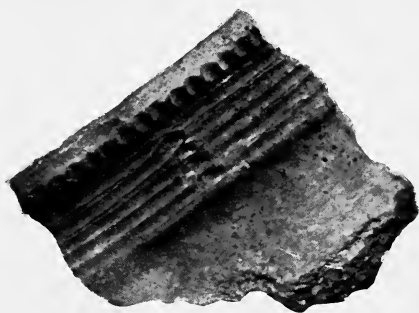


Fig. 31483

These fragments of pottery,—Nos. 30884 and 30885, were found on Lot 27, Con. 5, Vaughan, County of York. Their appearance indicates that both pieces were a portion of one pot, and evidently when new must have made a very ornamental utensil. The handle in both cases is well made and somewhat similar, indicating that they both belonged to the same pot, which would not be more than 5 or 6 inches across at its mouth. The material used is clay, and ground much finer than some specimens found in the Township of Vaughan.



Fig. 30884.



Fig. 30885.

CEREMONIAL BANNER STONES.

There has been much conjecture in regard to the intended function of a great number of prehistoric artifacts, the origin of which is probably to be sought in a religious or superstitious feeling. They are manufactured from a great variety of materials—bone, shell, metal, and stone, and especially slate and steatite. Some may owe their forms to the whim or fancy of the maker; others are perhaps symbolic for use in the manifold parades, dances and other celebrations; but the uses to which they might be assigned in their different forms are limited only by the imagination. The ancient Scandinavians wore "Victory Stones" suspended around their necks and the Eskimos to-day wear charms and amulets to bring success in fishing and hunting. The coast Indians of Alaska place great reliance on amulets which are usually carried upon their persons. There are a large number of these in our Museum.

These "Banner Stones" have been so designated by the late Dr. Boyle. They are found in various parts of this Province. The name was applied to them from the belief that they were used on the top of banners for decorative, ornamental or ceremonial purposes. As can be seen, there are certain fundamental features in their shape that would suggest to the student of archaeology forms that might well be designated Banner Stones—these features being the axial perforations and the



Fig. 179— $\frac{3}{4}$ size.

extension of the body into wing-like projections. These objects are usually made of some order of argillite, selected for its fine grain and attractive colouring. They are probably as a class the outgrowth of that remarkable culture developed along the valley of the Mississippi and her tributaries, known as the Mound Builders. We select from our collection a number of varieties which have been found in various parts of the Province.

Figure 179 is a Banner Stone found in Plympton Township, County of Lambton. It is of gray coloured slate and is greatly worn. The concave portion is perfectly smooth and polished. The hole is slightly larger on the convex side. At the apex of the convex side there is a slight flattening which is somewhat unusual. The peculiar shape of this stone differs from any other we have in the Provincial Museum. The sides of it are much worn. The hard portions of slate slightly protrude and it looks to be very old. The flared ends are grooved on one side and were probably grooved on the other but through age and wearing it has disappeared. This artifact has the appearance of great age, and as objects of this kind are found throughout the Mound Builders' country, it is quite possible it may have been handed down from them.

Fig. 180— $\frac{3}{4}$ size.

Figure 180: This stone artifact, made of slate, was found at Forest. The perforation running through its longer axis is perfectly uniform. The marking in the photo engraving is the result of a fracture which has been repaired. The flared ends are much the same as that of Figure 179, only the flared ends extend very much farther forward on the concave side of the stone. A stone such as this could be used only for ceremonial or ornamental purposes, most probably the latter.

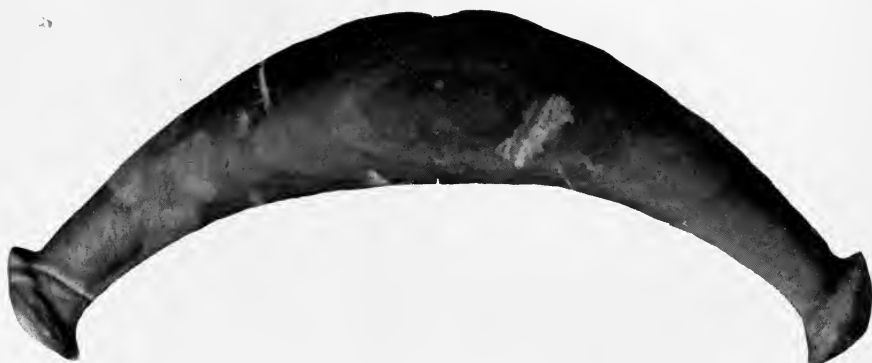
Fig. 178— $\frac{3}{4}$ size.

Figure 178: This probably is one of the most beautiful Banner Stones in the Provincial Museum. With it is a highly specialized crescent with flaring ends. It is beautifully worked, highly finished, colours varying from black to green slate, with an intermixture in some places of other material, changing the colour and general appearance. The concave side is flattened, while the upper one is rounded, and towards the centre is pointed. The perforation runs as is usual in these pieces across the veining of the slate. It is perfectly drilled without any markings or appearance of having been used. Without doubt, pieces such as this were used for ornamental purposes. The flared ends in this specimen differ from those of the previous ones in being rounded and not grooved.

Fig. 10736— $\frac{3}{4}$ size.

Figure 10736 is a Banner Stone found near St. Thomas, Elgin Co. When dug up, it was some four feet below the surface. It is a very heavy and coarse specimen, flattened on the concave side, and pointed at the end. The drilling differs from any of the others. From the fact that it appears to have been drilled both from the top and the bottom, the hole is very much smaller in the centre. This artifact might have been hafted and used for a pick, as it is rather heavy for ceremonial or ornamental purposes. It has all the appearance of a stone artifact dating away back to the early days of the Stone Age in America.

Fig. 27410— $\frac{3}{4}$ size

Figure 27410 is a stone found near London in the County of Middlesex. It is a peculiarly shaped Banner Stone, being quite concave on one side and flattened on the same. A protuberance extends out from both sides where it is bored. The boring is the same size through the stone. On one of the elevated sides is a ridge extending from the upper part to the lower. It is quite convex on its upper surface, and coming to a point is round but somewhat angular.

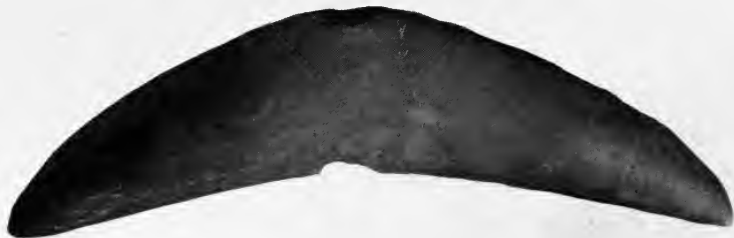
Fig. 2017— $\frac{3}{4}$ size.

Figure 2017 is an unusual shaped crescentic Banner Stone found on the Tuscaroran Reserve, Brant County, and presented to the Museum by Chief Smith. It is perfectly round, well bored, coming to a point at each end. The boring is slightly worn and would indicate that it had been used, by hafting, for some purpose, probably that of a pick.

Fig. 168— $\frac{3}{4}$ size.

Figure 168: A fine Banner Stone, found in the County of Norfolk. It is beautifully veined, and slightly flattened on the reverse side, as shown in photo-gravure; convex on the upper side. The hole is one third larger on the flattened side. The markings of the drill are quite prominent, due probably from different sizes being used. This article properly hafted would have made a very formidable weapon in warfare.

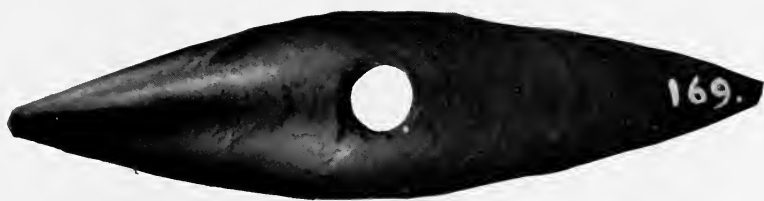
Fig. 169— $\frac{3}{4}$ size.

Figure 169 is a Banner Stone found in the Township of Oneida. It is also well marked and beautifully veined, and very slightly flattened on its lower side. The upper portion is quite convex and the hole is slightly larger on the convex or upper side than the lower. Its pointed ends are slightly broken, but from its appearance they had evidently been brought to a sharp point. The hole is well drilled, as in the others, but not so evenly, and is slightly larger on the convex side, differing in this way from some of the others.

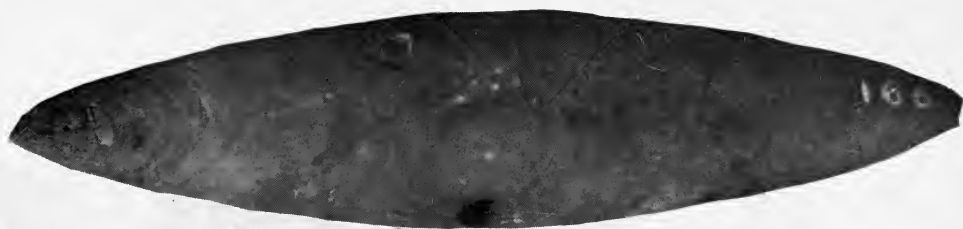
Fig. 166— $1\frac{1}{2}$ in. at centre, $6\frac{1}{2}$ in. long.

Figure 166 is a Banner Stone with an unusual appearance. It is made of very gray slate and is $61\frac{1}{2}$ inches long. The difference between this and the previous ones is that the boring is through the larger portion of the stone. The pointing is perfect and uniform on both ends. It has no flattening above or below, being circular from end to end.

Fig. 25123— $\frac{3}{4}$ size.

Figure 25123 is a Banner Stone from the County of Elgin, also flattened on the lower side, convex on the upper. The point at one end has been slightly disfigured, but at the other it evidently was very sharp when in its original state. The hole in this case is slightly larger on the upper or convex side, and smaller at the lower, where it is also flattened. The veining in this stone is exceedingly fine.

Fig. 25054— $\frac{3}{4}$ size.

Figure 25054 is another beautifully veined piece of slate, pointed at both ends and convex both above and below. The hole passes exactly through the centre and is slightly larger at one side than the other.

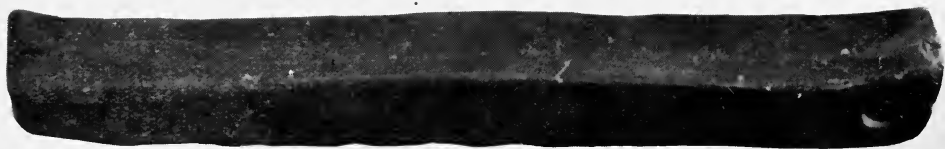
Fig. 23209— $\frac{5}{8}$ size.

Figure 23209: This bar amulet is slightly elevated in the middle with the usual diagonal holes at each end. It was found in Oxford Township and is of dark gray-coloured slate. Prof. William examined with great care the surface of a number of these problematical stones, testing them from a point of view of chemistry and mineralogy, to ascertain what elements in the stones weathered out and what elements remained. His observations are of great importance in indicating that many of these stones are old. "How old," he says, "I do not attempt to say in years but that the most of them were made and used before the Christian Era."

Fig. 10695— $\frac{3}{8}$ size.

Figure 10695 is a bar amulet made somewhat after the principles of bird stones, only the upturned ends are not so well marked. It is of greenish striped slate and when nicely polished would no doubt look very well as an ornament. The perforations can be seen extending from the side downward to the base, with no evidences of wearing. Articles such as these may have been used by doctors, soothsayers, or ritual priests. During peace and plenty they were not much called for, but when privations and warfare stalked amongst them, the ritualism of paganism at once became an object of great concern amongst all the tribes.

Fig. 26155— $\frac{3}{8}$ size.

Figure 26155 is probably a degraded bar amulet. This specimen is of reddish Huronian slate, and seems to have fallen into the hands of some one who has spoiled the end holes by grinding them partially off to make others along the base; or probably the other hole has been made previous to the grinding, and the piece may have been used for other purposes. This piece was found near Coleraine, Township of Vaughan, County of York.

Fig. 17173— $\frac{3}{4}$ size.

Figure 17173: This is a slate bar amulet, perfectly flat on its lower surface, concave on the upper, with slightly enlarged ends. Beyond this, there are no markings whatever thereon, not even a drilled hole. The use of such an artifact can not very well be even supposed.

Fig. 7358— $\frac{3}{4}$ size.

Figure 7358: This amulet was found in York County, near Toronto. It resembles very much Figure 17173, which was found in North Cayuga. The only difference between these two stones is the fact that one is very much heavier than the other, but in both the polish and finish are perfect and in general outline very similar.

Fig. 10748— $\frac{3}{4}$ size.

Figure 10748 is a very fine piece of greenish slate, flat on the under surface and slightly concave on the upper. There are grooved markings on each side, absolutely in the centre. One end is slightly larger than the other. There are no holes nor any other markings other than those mentioned thereon.

Fig. 10974— $\frac{3}{4}$ size.

Figure 10974 is a bar amulet found at Healey's Falls, County of Northumberland. It is of peculiar shape and is quite different from the preceding one. Its unbroken end is somewhat enlarged, and its drilled holes, the same as in bird amulets, are at both ends, one end having been slightly broken. There is no evidence of the perforation at the end having been used for any other purpose than that of fastening it to the dress or some part of the body for ornamental or useful purposes.



SideView.

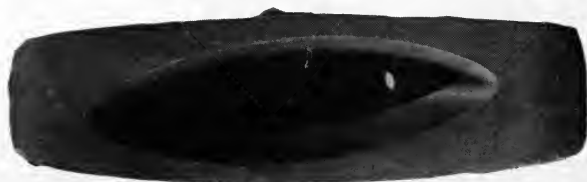
Fig. 19731—Top View— $\frac{3}{4}$ size.

Figure 19731 is probably the finest specimen of a boat stone in the Provincial Museum. It is made of grayish-coloured striped slate, hollowed out in the centre, perfectly smooth, besides being perfectly uniform. The holes are equidistant from the end and equal in size. For what purposes it could be used there are no evidences, as the holes show no appearance of use. It is surmised that they were employed as charms or talismans and carried about the person. Similar forms are found on the Pacific coast, some modelled after the native canoe, while others resemble the boat stones of the east.

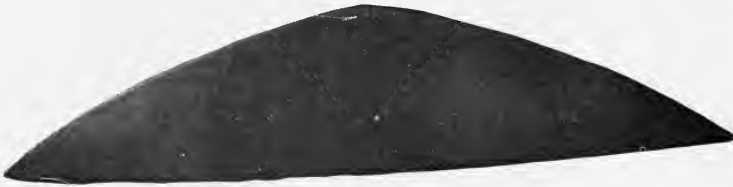


Fig. 214— $\frac{3}{4}$ size.

Figure 214 has been designated a boat amulet. The drilling out of the centre of the stone is beautifully and most regularly done. The holes differ from the others in their being bored closer to the end, but as far as the drilling is concerned, they are both done in the usual way. The hole on one side is nearly twice as large as that of the other, but in no way do they show any appearance of use.

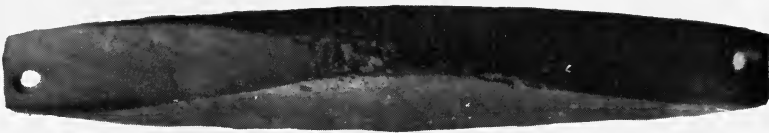


Fig. 215— $\frac{3}{4}$ size.

Figure 215, which has been designated a boat amulet, might just as well be called a bar amulet, as there is no hollowing out of the centre of the stone. This stone is perforated at both ends and in both cases the perforation shows evidence of wear and considerable use. Apparently it has been used for attachment to the dress for some purpose, probably fastening. The perforations which go through both ends would indicate such use.

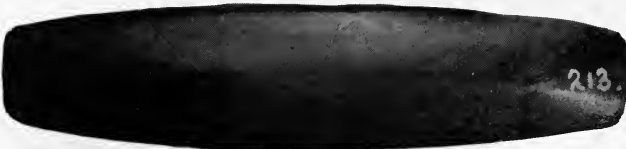


Fig. 213— $\frac{3}{4}$ size.

Figure 213 has also been designated a boat stone, but further than that it has little connection with them. There are no markings thereon. It is perfectly smooth, of very fine bevelled slate, and well polished on the lower surface, slightly curving upwards at each end. Without doubt it has been used for decorative purposes as the fine grain and polish would indicate such.

FLINT.

By some mineralogists the term flint is limited to the nodules or concretions found in chalk-beds. As this particular variety does not occur in Ontario it is contended that we have no "true" flint and a variety of names are applied to the allied forms found here. This, however, is a distinction without a practical difference. The wide diversity of colouring is principally due to minute quantities of iron in combination. In conditions necessary for its successful working into useful shapes no line is to be drawn between the flint of England, the chalcedony of Brazil, the hornstone of Indiana, and the chert of Ontario.



Fig. 6703— $7\frac{1}{2}$ in. long, $4\frac{3}{4}$ in. wide.

With the advent of European civilization in America, the Stone Age disappeared very rapidly,—never again to be reinstated except by those who manufacture for commercial purposes. Most of the flints found in this Province have been surface productions. They are not numerous in their ashbeds or kitchen middens, and but few caches have been found. The Ontario article is quite the equal of any found in other parts of the continent, and compares most favourably with the



Fig. 6753—8 in. long, $5\frac{1}{2}$ in wide.



Fig. 6709 - $6\frac{1}{2}$ in. long, 3 in. wide.



Fig. 6715
8 in. long, $1\frac{3}{4}$ in. wide.



Fig. 6711—9 $\frac{1}{4}$ in. long, 3 $\frac{3}{8}$ in. wide.



Fig. 6743—11½ in. long, 3½ in. wide.

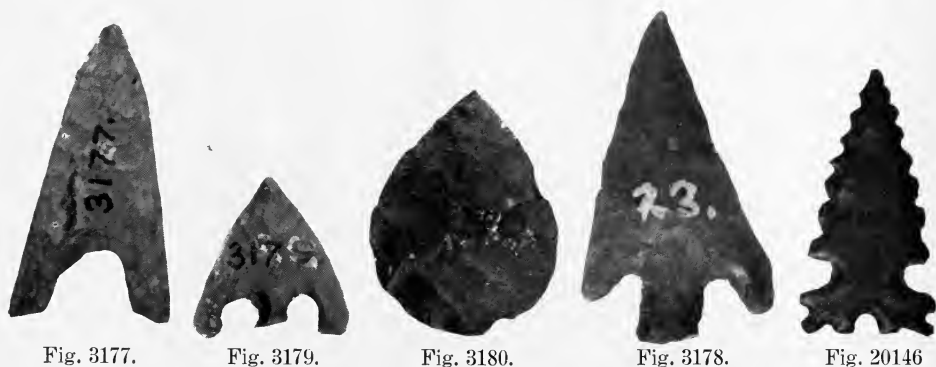
We illustrate here a series of specimens of chert, or flint, implements found in Canada, and also a comparative representation of those found in various parts of this continent with those found in Europe and the East.

Figures 6703, 6709, 6711, and 6715 represent a number of flint or chert weapons or implements taken from a mound on Tidd's Island, River St. Lawrence. They are quite characteristic of a number of similar large specimens found in the Provincial Museum. The uses that they have been put to have been probably various, the greater likelihood being that these implements were used largely for agricultural purposes, such as planting of corn, and seeds of various kinds, as at no time did they stir up the earth to any great depth. The loose alluvial soil found on the top was chiefly used by them.

Figure 6753 is a large amber coloured flint implement, the corner of which has been broken off, but either as a spade, an axe, or a hatchet when properly hafted, would make a most formidable implement. Evidently considerable iron entered into its composition as evidenced by its fine colour.

These specimens are amongst the larger ones in the Museum.

Figure 3177 is an arrow head found near Derry, in the north of Ireland. It



is evidently one that has been used for an arrow tip and is beautifully made of very light-coloured flint. Points of this kind are found distributed over the continent of America.

Figures 3178, 3179, 3180, are arrow points found in a peat-bog in the County Antrim, Ireland. The three specimens are quite characteristic of European flints and resemble very closely the flint implements found in this country. The chipping is both beautifully and regularly done. Thus we have in the old world as in the new, three succeeding phases of human development—the ages of Stone, Bronze, and Iron—which demonstrates that man slowly and gradually merged from a condition of utter barbarism in both hemispheres. The age of Stone in one may be an Electric age in another.

Figure 20146 is a beautifully formed flint found near Brantford. The outline is most unusual and method of chipping different from most of the others. This flint has well marked serrated edges. The seven points on each side of the flint are most regularly made. The two-pronged base with the three serrations and indentures between would indicate a flint article used for ornamental or ceremonial purposes.

Figures 5890, 10887, 25147, 5848: These drills are representative of a large number of a similar kind found in the Provincial Museum. The first three were

found in the western part of the Province. Fig. 5848 represents one found in Miami Valley, Indiana, showing the general uniformity of artifacts of this kind all over the continent. These drills were used largely in the manufacture of their pipes and also in the manufacture of all material that was not too hard for their use. Evans specifies five ways of making holes in stone, viz:



Fig. 5890

Fig. 10887

Fig. 25147

Fig. 5848.

- (1) Chiselling or picking with "picks," celts, or drills of flint, or other stone.
- (2) Boring with wood or horn using sand and water.
- (3) Grinding with a tubular grinder, as horn, cane, elder, etc., with sand and water.

(4) Drilling with stone drill, i.e., of flint or sandstone.

(5) Drilling or punching with metal.

Many of these flint drills are wrought with admirable skill and may be classed among the most remarkable relics of antiquity.



Fig. 19825

Figure 19825: Two flints found in Nottawasaga Township. They are not unusual, and were probably used for spearheads. They closely resemble some of the flint specimens found in Egypt, though the indentation at the base is not so extensive.

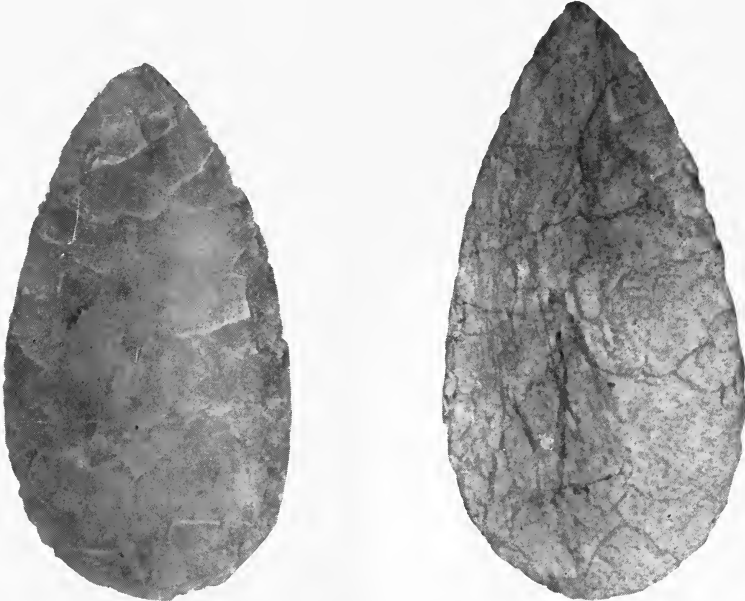


Fig. 1924.

Fig. 1925.

Figures 1924 and 1925 are a pair of typical leaf-shaped flints, found on Wolfe Island, River St. Lawrence. Flints of this kind most probably were hafted and used for knives. One of them, namely, 1924, is somewhat curved in the point and has all the appearance of having been used as a knife.

Castaneda who accompanied Coronado in 1541 to Quivira (Kansas) states: "They cut the hide open at the back, and pulled it off at the joints, using a flint as large as a finger, tied in a little stick, with as much ease as if working with a good iron tool. They gave it an edge with their own teeth. The quickness with which they do this is something worth seeing and noting."

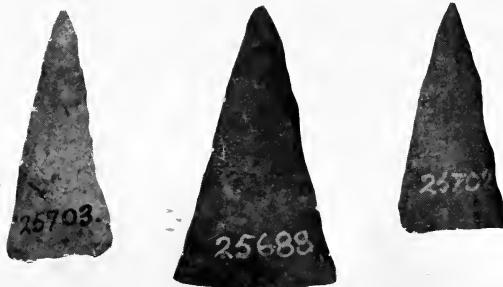


Fig. 25703

Fig. 25688

Fig. 26702

Figure 25688, 25702, 25703, are arrow points found in Waterloo Township in the County of Waterloo, and quite characteristic of arrow tips found all over the Province. Pointed flint objects without stems are for the most part triangular war points. The story of their use is as old as the glacial sands, and the reason

why they are so called is because there is no way of fastening them to the arrow securely, and they become detached from it when the victim attempts to withdraw the shaft. The use of both glue and sinews was the method of the Indians for fastening the tip to the split shaft. In the west the glue was made from the horns and the hoofs of the buffalo.



Fig. 31010.



Fig. 31011.



Fig. 31012.

Figures 31010, 31011, 31012 are characteristic scrapers and were found in the Township of Vaughan, all three lying together, close to the ashbed. Articles of this kind serve pretty much the same purpose the world over. These are probably the most common articles of this kind found in the Province of Ontario.

While scrapers are commonplace tools, yet they played a very important part in the life of ancient man. The economy of the Indian is well illustrated in this department of flint, for broken knives, arrows, spearheads, were made into scrapers.



Fig. A.



Fig. B.



Fig. C.

Figures A, B, and C represent three obsidian arrow-heads or spearheads from Mexico. While each one of them differs materially from the others, they all resemble closely similar articles found in the northern part of the continent.

Obsidian is volcanic glass and was much used by the Indians of Mexico, Arizona, and California. It is generally blackish in colour but some varieties are brownish, reddish, or greenish in hue. It is not found in Ontario.

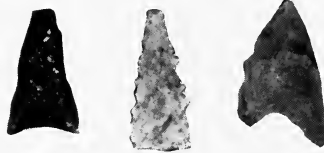


Fig. 1.

Fig. 2.

Fig. 3.

Figures 1, 2, and 3 represent three arrow tips from Arizona. These tips were very numerous in that section of the United States, and are very much smaller than even the smallest of those we find in this Province.



Fig. 26965.

Figure 26965 is a bone arrow head or spear head found in the County of Simcoe. While it resembles very closely the ones previously illustrated in stone, it is the only one of the kind we have in the Museum. It was probably made from the tibia of a deer, and undoubtedly many of this kind were used by the aborigines, but unless preserved in ashes, few bone implements are found.

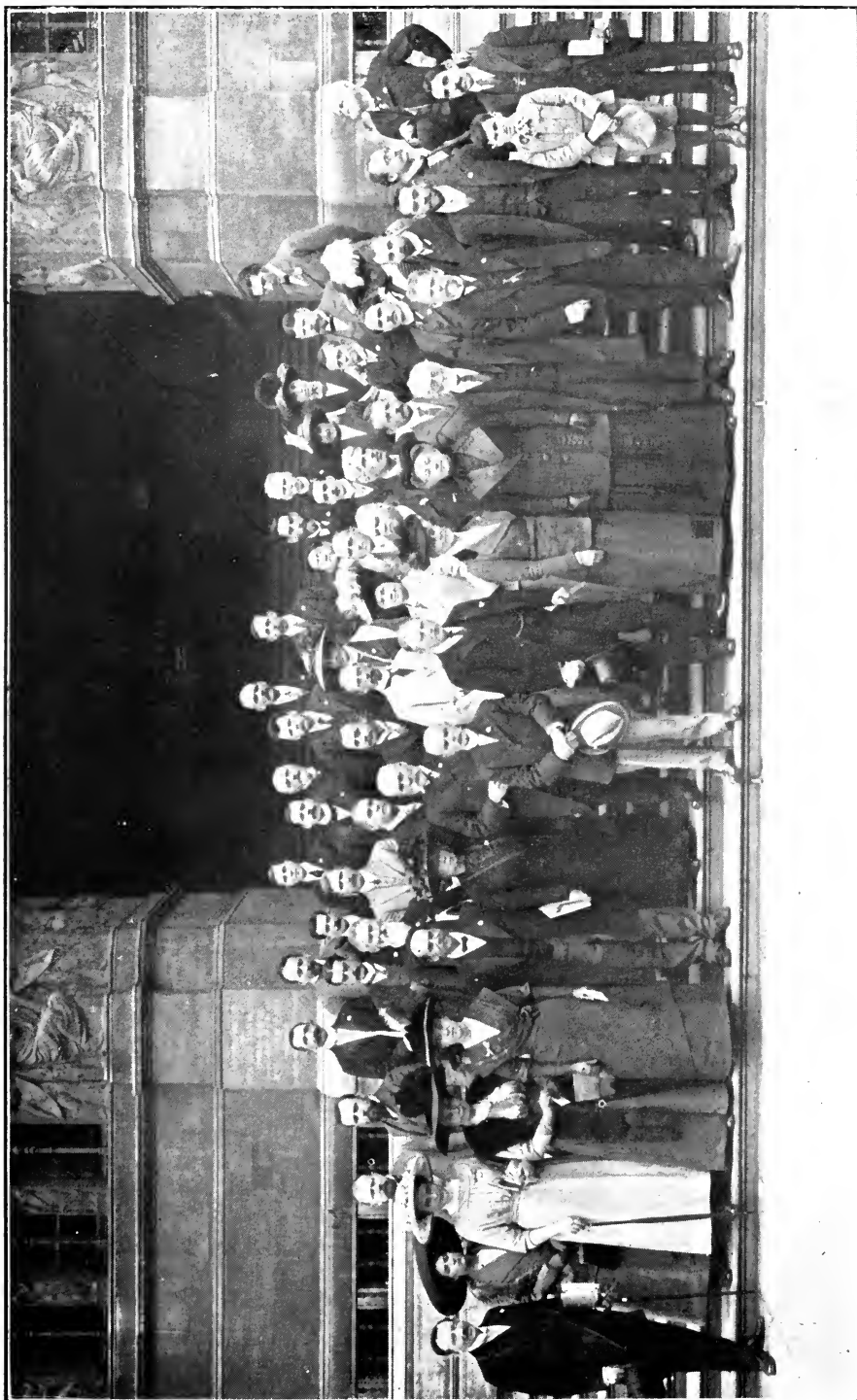
PRE-COLUMBIAN COPPER.*

Back into the midnight history of the past, back amongst the ruined palaces of unknown cities, back around the sacrificial altars beneath the vast mounds of the unknown races of all continents we can trace the existence of copper or bronze. Even the legendary lore of the earliest ages surrounds the history of this most useful metal with the same myths as cloud the story of mankind. When the site of the Great Pyramids of Egypt were sand dunes—when the cities of the ancient Hittite Empire were unbuilt—when the palace of Knossos, the ruined capital of the ancient Minoan Kings, was yet in the Stone Age, we find bronze implements and ornaments had been in use for ages. On the American continents similar conditions existed. Amongst the stately ruins of the Aztecs, Toltecs, and Incas, we find copper and can trace it even back into the inscrutable darkness of Pre-Columbian times. In those great civilized centres of Mexico and the west coast of South America, vast stores of copper, gold, and silver were to be found, used mostly for decorative architecture and utilitarian purposes. When we pass northwards amongst the tribes occupying the territory which is now known as the United States and Dominion of Canada we stand in wonder at the existence of so many linguistic families, and are at a loss to conceive how many ages were required to produce such a condition. Yet amongst them all—whether permanently located or wandering tribes—implements of copper were in use.

Much of this copper was derived from the extensive mines on Isle Royale and the western and southern shores of Lake Superior. The State of old Virginia supplied a small amount and probably the vast copper mines on Copper River in the barren lands east of the Mackenzie River may have supplied some. As these copper fields were utilized by the Esquimos undoubtedly some of it, through trade, drifted southward. Primarily the copper used by the Indians was that ground off during the glacial periods and carried south. From the mines of Lake Superior copper was carried south and east and west to very great distances, native copper having been found as far south as Cincinnati. Probably some of this copper came from the far north, carried south during some of the Glacial periods, but, be that as it may, the native races soon learned to trace up those stray nuggets to their origin, and soon we find the mines of Lake Superior utilized by them. Isle Royale has many mines, and one has but to tramp over the concealed remains of those vast ditches to appreciate the amount of work done and the amount of copper that must have been taken southward. By whom and when this was done we know not—but the weight of evidence would indicate that the mines were operated at the time of the European occupation and work was discontinued owing to the great unrest caused by the introduction amongst the various frontier tribes of modern methods of warfare.

The records of the ancient races who did this work are only to be gathered from the artifacts they have left behind. In the great trenches and numerous pits are to be found stone mauls elegantly formed and well suited to the work to be performed. Copper axes and wedges, and the remains of wooden shovels and supports, preserved by the infiltration of the salts of copper, all show a well established system and regular methods for carrying it out. In those ditches can be seen to-day the evidences of where fires had been made to heat the stone; cold water would then be thrown thereon and after the resulting disintegration the mauls completed the work of laying bare great sheets of copper. Copper axes, adzes, and wedges, assisted by wooden shovels, were used in removing the

*Read by Dr. Orr before International Congress of Americanists, London, Eng., June, 1912.



International Congress of Americanists, London, Eng., June, 1912.

debris. In no place do we find that they penetrated the earth any very great distance. Some of these ditches are twenty-five feet in depth, but most of them very much less. There is no reason to think that the men who worked these mines were other than some members of the great Indian family that inhabited the continent in Pre-Columbian times. That a great civilized race commonly called Mound Builders existed and worked the mines is absolutely without proof. That the people who did this work lived in the neighbourhood is without doubt. All along the Rainy River, through the Lake of the Woods, away north to the Grand Trunk Pacific Railway crossing, there are evidences of extensive settlements in



Fig. 2 (Fig. 3664).

olden times. All through this district are many mounds, mostly burial, some containing copper implements and ornaments, many containing pottery resembling that found in the mounds along the Mississippi and its tributaries. None of these mounds differ materially from the ordinary burial mound of the various nomadic tribes, distributed over the great watershed of the central part of the Continent.

The distribution of copper was effected by barter between the various tribes all over America. That the Indian trader covered extensive tracts of country is

well exemplified by the warrior bands of the Iroquois Confederacy, now on the banks of the St. Lawrence at Quebec, next away in Virginia, and in a short time at the head of Lake Huron exterminating the few Wyandots left at the Sault. The covering of so much territory, thousands of miles in extent, leads us to no other conclusion than that the inter-tribal commerce all over the Continent was very extensive in those Pre-Columbian times.

In the Province of Ontario the finds of copper have not been very extensive. The wide distribution is shown by the fact that copper artifacts are being found all over the Province.

In the Provincial Museum we have about 100 specimens of copper, including artifacts of most of the varieties found in the United States and Canada. There is also in the collection a number of specimens which undoubtedly show contact with Europeans. In this case it is not necessary that the artifact be anything but pure native copper, as the early trappers and travellers as well as missionaries made use of the native copper in the possession of the Indians out of which to design something useful; and many of the knives found have, I think, probably been remodelled by Europeans. These specimens in our Museum have been procured from all over the Province, some surface finds, but most of them from village



Fig. 4. (Fig. 25548)

sites and rifled graves. I have opened a great number of ossuaries myself but have never found copper artifacts in any of them.

*Fig. 1 (28,771) is a unique specimen of native copper found by Dr. Boyle on the Lowery farm near Niagara Falls; he considered it as a piece of pure copper of Pre-Columbian origin. The marks of the pounding can be seen thereon.

Fig. 2 (3,664) is a beautiful specimen of copper adze, found at Fort William, which is only a short distance from the copper mines. This adze is purely Indian in its design, and when properly hafted would do most serviceable work. While this is the largest copper adze in our collection, it is only one of a number made after the same pattern, and all evidently used for the same purpose. It weighs 1 lb. 4½ ozs.

Fig. 3, (3681) is a copper chisel taken from an ossuary near Midland, Ontario, by H. F. Switzer, Esq., Clerk of the Town of Midland. There were about fifty skeletons in the burial pit. Some other copper articles were also found therein. This article had been wrapped in a beaver skin, only that portion of the skin remaining which was underneath and had been preserved by the salts of copper.

The distribution of pieces of this kind is very wide, for in all parts of Ontario, from east to west, they are to be found. Some excellent specimens have been

*Fig. 1 appears on page 11, 1911 Report.

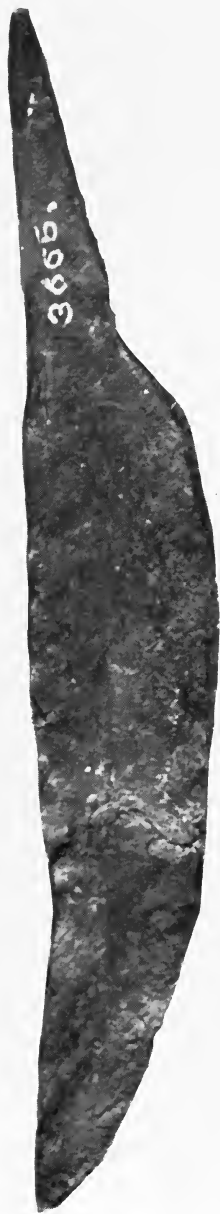


Fig. 5 (Fig. 3665).



Fig. 3 (Fig. 3681.)

unearthed in the burial mounds at the Lake of the Woods. In a few cases they are sharpened at both ends, and when they have been used as a chisel the effects of the hammer can be seen.

Fig. 4, (25548) represents what has been a well formed sheet copper pipe, the markings showing where the union was made. Age has done much to mar its general appearance. There are two pipes of this class in the Museum, and they were believed by the late Dr. Boyle to be purely Indian. In general outline they correspond with a number of clay and stone pipes in our possession. We must always remember that European pipes were originally copies from early Indian forms.

Fig. 5, (3,665) is a characteristic knife and one of a great number among our exhibits. Many of these, however, were made from sheet copper, which was easily cut into shape and then pounded down, so that there was no trouble hafting and sharpening it. Specimens of this kind have been found in every part of the Province.



Fig. 6 (Fig. 3695).

Fig. 6 is a copper spearhead found in Minnesota and resembles very much similar artifacts found in the Province of Ontario. It is made of native copper

with the hafting end of it made similar to the copper spearheads found in various parts of this Province. Age and weather have corroded it considerably, but it still shows evidences of being well made and the lines on it are almost perfect.



Fig. 7 (Fig. 28298.)

Fig. 7 is a tool of native copper pounded into its present shape. What use was made of it, at the present time it is hard to say. It was found in a gravel pit near Nepigon, New Ontario, and is evidently pure copper procured from the Superior district, and probably very old.



Fig. 8 (Fig. 3702.)

Fig. 8 is a lump of native copper, weighing $3\frac{3}{4}$ lbs., found on the farm of Mr. Gilgallen, Lot 12, West Williams, Middlesex. This piece of copper had evidently been carried there as a piece of merchandise out of which to manufacture copper implements and ornaments, as the place of finding was not likely to produce any copper during the drift age, but was evidently brought by the Indians from Lake Superior. It is pure copper and has the appearance of some work having been done on it. In fact, one side appears to have been cut. It was from material of this kind that the natives of this Province manufactured most of their copper implements.

When we look at the specimens we have, after 400 years of exposure and decay, I often think we do not give the red man the credit to which he is entitled for his ingenuity.

For many years there has been controversy as to the tempering of copper. In no part of the North American continent outside of Mexico is there any evidence that copper was tempered. No copper implements found in the Province of Ontario were anything more than pure copper, hardened by pounding. We must remember that over four centuries have passed since European contact, and during the earlier years of this association we know that much bronze was made use of in barter with the Indians; no matter what part of the continent we visit, there is some amalgam of copper to be found in the ashbeds and burial mounds. All this is of European origin. In our collection there are many articles of sheet copper such as arrowheads, ornaments, etc., all made from sheet bronze supplied by the early traders. Amongst the Esquimos of the Mackenzie River basin, copper has been in common use from time immemorial. All the artifacts are made of pure

copper procured from the copper belt in the vast barren lands west of Hudson Bay: and though it has been alleged that the Esquimos had the knowledge of tempering copper, such is not the case; for no copper has been seen amongst those peoples harder than that produced by hammering.

In Mexico and the west coast of South America, conditions were different. Here the inhabitants were metal workers and their ornaments in gold, silver and copper were of the highest order. There is now no doubt that in those civilized centres they had arrived at the stage of manufacturing bronze. Charney has stated that they possessed the knowledge of tempering copper. Anything that he found harder than copper was an amalgam. We must remember that the rapacious crew of Latins, Gauls, Teutons and Celts who brought bronze to the American continent were looking for everything in the line of precious metals, and they early learned that by securing native copper they could soon transform it into bronze, and return it to those from whom it was pilfered at four times the price.

That the Mayas had amalgams of copper is well shown in an article by Blackinton in the *American Anthropologist*, in which he describes the finding of copper bells in a cave in Honduras. After describing the clear, ringing note made by the ball of copper inserted as a clapper, he states that these bells are not only surprising in their design but are especially wonderful on account of the workmanship and technique displayed. Some were cast in moulds, others built up tier upon tier of purely spun wire. The copper of which these bells are constructed contains gold in small quantities.

INDIAN SKULLS.

The skull of the pre-historic Indian varies very much in its conformation. While it may be somewhat smaller than the average European skull, yet that of the North American Indian particularly conforms very closely to those of the European, and in type is very little behind them. Amongst those skulls resurrected from the ancient receptacles of past ages we find almost every form of the three principal classes of cranial forms, viz., *dolichocephalic*, *brachycephalic* and *mesocephalic*. To illustrate the different forms we have selected skulls of known antiquity from various places all over the continent, to show, as far as possible, the great difference in the cranial formation of the American Indian. The following measurements of a Peruvian, Algonquin, British Columbian, and Huron skull were made by Dr. C. S. McVicar, of Toronto.

SKULL MEASUREMENTS.

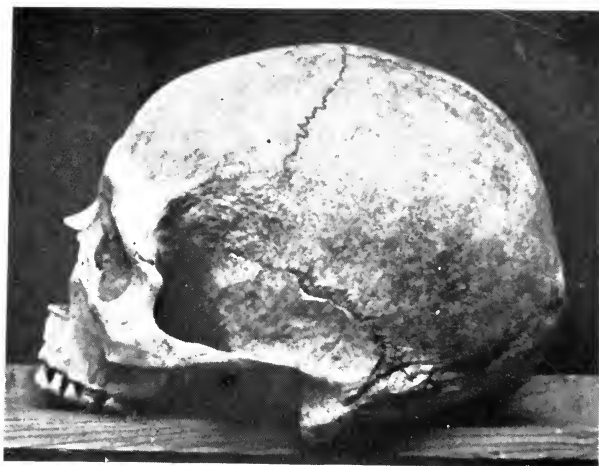
Detail Measurements. C.M.	Peru.	Algonquin.	Brit. Col.	Eskimo.	Huron,
Diameter antero-posterior (glabella-occipital)	15.5	20.	16.	17.8	18.5
Diameter antero-posterior (ophryon-occipital)	14.8	20.	15.5	17.8	18.5
Diameter lateral maximum	15.	12.8	15.	13.	14.
Diameter bregma-opisthion	12.5	15.5	13.5	13.5	16.
Diameter bregma-biauricular line	12.	13.5	11.5	12.	12.5
Diameter frontal maximum	12.	10.	12.	11.	11.5
Diameter frontal minimum	10.	9.	10.	10.	10.
Are nasion-bregma	10.	12.	10.	10.	11.
Are bregma-lambda	9.	13.	12.5	9.5	11.5
Are lambda-opisthion	8.5	9.8	8.8	10.	10.
Circumference maximum	49.5	52.5	50.	51.7	52.5
Cephalic Index	97.	64.	94.	74.	75.
Vertical Index	80.	77.	84.	76.	87.
Estimated capacity in C.C.	1,250	1,450	1,120	1,270	1,360



PERUVIAN SKULL.

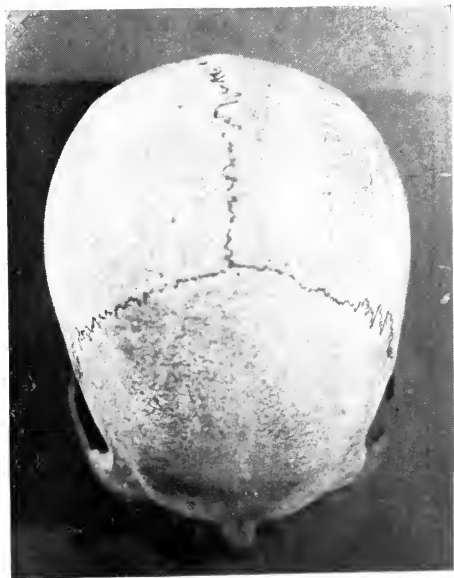
This skull amongst some others was presented to the Museum by Dr. Hrdlicka, of the Smithsonian Institute. It shows marked frontal with moderate occipital depression, as if pressure had been used in moulding the skull in the youthful days of the child. This skull was found at Pachacamac, Peru, and is quite characteristic of most of the skulls in that district.





ALGONQUIN SKULL.

This skull is a fairly typical one of the great Algonquin family. As a rule not only in the shape of their heads but in the capacity of their skulls they were very much superior to most of the other Indian races on this continent. This skull is quite characteristic of the family and was found in Northern Ontario.





BRITISH COLUMBIA SKULL.

This skull is one presented to the Museum by Mr. W. H. Jones, of British Columbia. It is quite characteristic of a large number of ancient skulls found on the Pacific coast. Like the Peruvian skull it shows evidence of frontal depression, due probably to pressure.





ESQUIMAUX SKULL.

This skull differs materially in shape from most of the others. It is more or less of rounded shape, and was presented to the Museum by the Rev. C. E. Whittaker, of Fort Macpherson. It was found on a hill about forty feet from the sea cliff, Arctic Ocean, midway between Herschel Island and the Mackenzie River, at a place called King Point on the charts. Within one-quarter of a mile of the spot Captain Roald Amundsen, of the sloop *Gjoa*, passed the winter of 1905-06, and buried there Lieut. Wiik, his astronomer.





HURON SKULL.

This skull was selected from a large number found in an ossuary in the Township of Vaughan. In selecting it a fairly average one was taken, and this probably represents as nearly as possible the average ancient Huron skull measurements.





Fig. A.

Fig. A is a very unusual formed Huron skull. It was taken from one of the ossuaries in the Township of Vaughan, and in its origin long antedated European occupation of that district. The photo-engravure brings out very well the sagittal suture, extending from the nasal bone, up through the frontal bone, dividing the same into two. We have one other specimen of a similar kind in the Provincial Museum, but the skull is a German one from Strasburg.

LIST OF VILLAGE SITES IN VICTORIA COUNTY AND IN SOME ADJOINING LOCALITIES, CORRECTED TO DATE.

BY COL. G. E. LAIDLAW.

1. On lots 1 and 2, North Portage Road, Bexley Township, on north end of lot, owned by Laidlaw estate.
2. On lot north $\frac{1}{2}$ of 23, Con. 3, Eldon Township, owned by W. J. Stanley.
3. On east side of lots 4 and 5, Con. 5, Bexley, owned by Percy Corson.
4. On lot 2, North West Bay, Bexley, owned by Sir Wm. McKenzie.
5. On lot 9, Con. 3, Bexley, owned by G. T. McKague.
6. On lot 18, Gull River Range, Bexley, D. Smith, owner.
7. On west $\frac{1}{2}$ lots 5 and 6, Con. 2, Bexley, Wm. Benson, and W. J. Chirpaw, owners, respectively.
8. On Block E., Bexley, Portage Road, Laidlaw estate.
9. On lot 22, Con. 8, Eldon Township, Sam Truman, owner.
10. On lots 44 and 45, South Portage Road, Eldon, Sir Wm. McKenzie, owner.
11. On east $\frac{1}{2}$ lot 29, Con. 1, and west $\frac{1}{2}$ lot 29, Con. 2, Bexley, owned by Wm. Perrington and John Cory respectively.
12. On Indian Point, Bexley, J. H. Carnegie, owner. This is the first site on Indian Point.
13. On lot 2, Con. 11, Mara Township, Ontario Co., J. Newby, owner.
14. On lots 56 and 57, Front Range, Somerville Twp., owner, Geo. Rumney.
15. On lot 60, Front Range, Somerville, J. Wallace, owner.
16. On lots 19 and 20, Gull River Range, Bexley Township, Jas. Moore, owner.
17. On lot 24, Con. 2, Somerville Twp., Jos. Eade, owner.
18. On lot 25, Con. 3, Digby Twp., Wm. Reid, owner.
19. On east $\frac{1}{2}$ lot 1, Con. 8, Laxton Twp., Deer Lake, a Mr. Innis is owner.
20. On Block E. Bexley, on lake shore, Laidlaw estate, owner.
21. On lot 21, Con. 9, Eldon Twp., Donald Frazer, owner.
22. On lot 17, Con. 3, Carden Twp., John Chrysler, owner.
23. On north $\frac{1}{2}$ lot 12, Con. 1, Fenelon Twp., and also on south $\frac{1}{2}$ same lot, owned by Neil Clark and Mrs. S. Foster, respectively.
24. On lot 23, Con. 1, Fenelon, occupied by John Truman.
25. On east part of lot 21, Con. 1, Fenelon, owner, Alex. McKenzie.
26. On west $\frac{1}{2}$ lot 23, Con. 2, owned by Jamieson Bros. This site is in connection with a semi-circular earth work.
27. On broken front, lot 26, Con. 3, Fenelon, Birch Point, Dougald Sinclair, owner.
28. On west part, lot 26, Con. 4, Fenelon, James Fisk is occupant.
29. On lots 69 and 71, Front Range, Somerville, Edward Lee, owner.
30. On lots 11 and 12, Con. 8, Laxton Twp., John J. Gostlin and G. Winterburn, respective owners.
31. On lot 12, Con. 7, Laxton Twp., Newton Winterburn, owner.
32. On Indian Point, Bexley Twp., Balsam Lake. This is the second site on above Point, J. H. Carnegie, owner.
33. On lot 29, Con. 3, Fenelon Twp., John Forman, owner, east side of Long Point, Balsam Lake.
34. On lot 13, Con. 10, Eldon Twp., H. Thornbury, owner.
35. On lot 9, Con. 8, Fenelon Twp., Ball Point, Sturgeon Lake, John Cuppins, owner.
36. On east $\frac{1}{2}$ lot 20, Con. 8, Eldon Twp., Donald McArthur, owner.

37. On lot east $\frac{1}{2}$ of 5, Con. 8, Carden Twp., Patrick Duggan, owner.
 38. On lot 41, South Portage Road, Eldon Twp., owned by Sir Wm. McKenzie.
 39. On lot 17, Con. 10, Eldon Twp., Wm. Thornbury, owner. This site may be a continuation of site 34, as neither place has been examined by myself as yet.

All the above sites have been more or less described in the Ontario Archaeological Reports, so it is not necessary to take up space by describing them in detail. The following are new additions and will be described more in detail:

40. On north part of lot 11, Con. 2, Bexley, is either a small village site or an isolated camp, as pottery fragments, pieces of pipes and flint chips can be picked up on the crest of a small hill or tongue of land running into a swamp. Present owner, H. Southern. Place was examined in 1897 by myself in company with the then occupant W. G. Peel.
 41. A short distance to the north of Mr. J. Chrysler's place, on the east side of Mud Lake, Carden Twp., existed a more modern camp site, on a place called "The Indian Clearing," now grown up with large sized trees of second growth. The Mississaugas grew corn here about the year 1840. French axes, iron tomahawks and steel knives, have been found here, also more ancient relics such as clay pipes, pottery celts, flint arrowheads. A few slate gouges, a copper knife, and a red stone pipe with a long square sectioned base with a projection on top have been found in this vicinity. Material of this pipe is probably Nottawasaga sandstone.
 42. F. D. Moore, K.C., of Lindsay, Ontario, in a letter, dated April 8th, 1912, gives this description of a site on west $\frac{1}{2}$, lot 2, Con. 3, Fenelon Twp., from which he obtained a number of relics presented to the Provincial Museum in 1908.

"The site is on loamy soil, and is about 200 or 300 yards south from McLaren's Creek, and one-half mile west of the bridge on the Fenelon Falls road near Cambray P. O.

"The articles picked up were pronounced by the late Dr. Boyle to be of Huron make. The site must have been occupied as such for many years, as the ground on which the huts or camps stood was so burnt and discolored that they are still easily distinguishable from the surrounding earth although the land has been cultivated continuously for years. It had ceased to be occupied by Indians long before the coming of the whites."

About 35 or 40 years ago Messrs. Dr. DeGrassi, Samuel Irwin, Inspector of Weights, Victoria County, and Dr. Chas. Foley, of Lindsay, obtained a lot of relics from this site. They also found two or three skeletons buried in a sitting position, the knees being drawn up to the chin. In each grave was a small quantity of parched (carbonized) corn. Mr. Moore has never heard of any other human bones being found near this village site, though he has found bones of all the animals common to this part of Ontario, and the vertebra of some large animal, probably moose or elk. All the deer leg bones had been split.

Mr. Moore also comments on the absence of "flints," and that the tobacco pipes are all of the usual clay make, but broken, also on the occurrence of numbers of round stones (common to all sites here), and the absence of mortars. The usual relics occur, pottery fragments perforated (canines), bear teeth, stone axes, both broken and perfect, bone artifacts, etc. The collection of relics made by the three gentlemen afore-mentioned was destroyed by fire some few years ago.

Relics occur on the farms in the neighbourhood. The late Mr. Samuel Irwin in a letter of the 26th August, 1897, stated that some of the graves on this site contained relics, and in a field close by were the remains of what he took to be pottery kilns (i.e., ashbeds). This property was occupied at that time by a Mr. John Daniels.

43. The late Mr. Isaac Knight, Public School Inspector, Lindsay, Ontario, in a letter, dated 20th January, 1900, says, that Mr. Wm. Thurston informed him that his father, Jabez Thurston, when building a house near Sturgeon Point, north shore of Sturgeon Lake, a quantity of bones were found indicating an Indian burial place, on rising ground a few yards west of the Verulam Twp. line.

I have heard from other sources that relics and graves existed here. This point is now a favourite summer place.

F. D. Moore, K.C., of Lindsay, letter of April 20th, 1912, mentions 4 or 5 supposed "ossuaries" at this place. Lot 10, Con. 10, Fenelon Twp., and also refers to flint chippings at this place.

44. Mr. John Cuppins, lot 9, Con. 8, Fenelon Twp., informed me, on the 18th April, 1902, of a large camp site on lot 6, Con. 5, Verulam Twp. Large quantities of relics, celts, bones, pottery, etc., occur here. Robert Mitchell, owner, Dunsford, P. O.

This place is also referred to, in the *Lindsay Post*, 3rd Sept., 1909, and in Ontario Archaeological Report, 1902.

Jas. Dickson, D.L.S., Fenelon Falls, in letter of 19th April, 1912, verifies number of lot, also Mr. Jas. Lithgow, License Inspector, Bobcaygeon P.O., ex-reeve of Verulam, verifies this lot in letter of 25th April, 1912.

45. Mr. A. F. Hunter, of Barrie, Ontario, in a letter of 19th May, 1902, refers to a site at Cambray P. O., Fenelon Twp., where the Presbyterian Manse now is. A Mr. Wilkinson owned the place, but his son is now on it, 1902. East $\frac{1}{2}$ 5, Con. 1, Fenelon—there is a graveyard here, also European relics occur.

46. On Jan. 22nd, 1900, I received information about a site on Thos. Douglas's farm, lot 10, Con. 1, Fenelon Twp., $\frac{1}{2}$ mile south of site 23 at Neil Clarke's. I examined the place on 8th May, 1901, but could find no relics. Four or five years previous some arrowheads were found, and a skeleton was dug up by Mr. Douglas and Dr. Foley, of Lindsay. Mr. George Coates, of Cambray P. O., states that there is a camp site and a burial place on this lot, see *Victoria Warder*. 24th April, 1903.

Mr. George Coates in letter of April 26th, 1912, states that on this lot is a "surprise pit," i.e., one of the large natural pits sometimes found near village sites.

47. The late Dr. David Boyle, Superintendent of Provincial Museum, Toronto, in a letter of Sep. 21st, 1907, gives information of a supposed ossuary on lot 21, Con. 4, Carden Twp., close to Lower Mud Lake, owned by Mr. Joel Day. I have other information concerning relics, etc., from this particular locality.

48. Mr. A. F. Hunter, of Barrie, Ontario, in a letter of October 29th, 1907, conveys information of a site on Mr. Jas. W. Day's place, lot 1, Con. 13, Mara Twp., Ontario Co. This site is about one mile north of site on J. Newby's farm, No. 13.

49. Mr. A. F. Hunter, of Barrie, Ontario, letter of October 29th, 1907, conveys

information also of a site on a Mr. Van Vlack's place, lot 30, Con. 3, Rama Twp., Ontario Co.

(Do not confuse Rama with Mara, for they are two distinct Townships, adjoining each other).

Mr. Hunter did not examine this site or No. 48.

50. Mr. John Cuppins, on 18th April, 1902, informed me of a site existing on Mr. Strowd's lot 16, Con. 6, Fenelon Twp. Subsequent investigation shows that this might be lot 18, Con. 6, owned by Chas. Strowd.

This site is referred to in Ontario Archæological Report, 1902.

51. Mr. John Cuppins on 18th April, 1902, also informed me of a site on the adjoining farms of Hewie and Cullis, about two miles north of Cameron P. O. These lots would be probably 14 in Con. 6, Jas. Hewie owner, and 15 in Con. 6, J. Cullis, owner, Fenelon Twp. Mr. R. G. Corneil, of Lindsay, informs me in a letter of April 30th, 1912, that he has gathered relics on these two lots. Mr. Jas. Dickson, D. L. S., Fenelon Falls P. O., letter of April 19th, 1912, mentions the fact that a good many relics were found here.

52. On Mr. S. Pogue's lot, east $\frac{1}{2}$ of 26, in Con. 5, Verulam Twp., about four miles north of Sturgeon Lake, when Mr. Pogue first began to plow up this place, he found lots of broken pottery, broken pipes, arrowheads, and the usual stone implements, also decaying human bones, and ashbeds or fire-places. My information is derived from F. D. Moore, K.C., of Lindsay, letter of April 16th, 1912, and letters from Jas. Dickson, D.L.S., Fenelon Falls, dated April 22nd and 30th, 1912.

53. Mr. Frank Whalen, Kirkfield P. O., informed me, on the 9th May, 1912, that on their lot, No. 6, in Con. 5, Carden Twp., on east bank of a small creek flowing into the Talbot River, on the north side, is a spot where formerly they used to plow up pipes, pottery, "skinning stones," etc., and on this place were dark patches of ground and ashbeds.

54. Mr. Wm. Fry, of Victoria Road P. O., on 23rd May, 1912, informed me that about 25 years ago, when plowing on the south end of lot 59, South Portage Road, Eldon Twp., they used to turn up quantities of pottery fragments, stone implements, etc. Amongst the relics turned up was one complete earthen basin of reddish colour. This was put to one side but eventually got broken. This site is about one mile south of the Portage Road, and is on the north side of a hill which faces east. The Grass River, flowing from the south-west, bends around this hill, and flows north-west in a winding fashion into Mitchell's Lake. There is considerable swamp and beaver meadow along this creek.

The basin mentioned above was about as large and of the same shape as a small wash basin.

55. This site is on Moses Mitchell's property, lot 54, N. P. R. (North Portage Road), Eldon Twp., and is close to the Portage Road. The site is on a small flat of land on the north side of a hill, forming somewhat of a point on south shore of Mitchell's Lake.

Several ashbeds occur. The relics obtained at various times are gouges and celts, a semilunar slate knife, and a copper spatula. Several iron hatchets have been found on the hill, but not on the site. This hill is a long narrow hill, with direction east and west, and was surrounded on all sides by swamp, beaver meadow and lake, and is practically surrounded now

by the drowned lands of the Trent Canal. The old trail probably traversed it lengthways.

On the adjoining lot, No. 55, N. P. R., to the east, formerly owned by the Fry family, on same flat and quite close to site, relics have been found. A copper crescent scraper was found on west end of hill. Mitchell's Lake is a small, shallow, swampy marl lake of about half a mile diameter. The site is close to shore and at foot of hill, and about a quarter of a mile north of the Portage Road (or old trail).

56. Mr. Wm. Fry informed me on the 3rd June, 1912, that when he owned (or his family) the north end of lot 56, North Portage Road, Eldon Twp., north of Mitchell's Lake, that they used to plow up pottery fragments, skinning stones, etc. This would probably be near the exit of Grass River from the lake, and would either be a small site or a fishing camp. This particular section is so converted into "drowned land" now by the raising of the water for use of the Trent Canal, that it has somewhat changed that portion of the topography of Eldon Township. It is pretty hard to distinguish now the old shore lines, and the course of the Grass River there.

This site is distant about three-quarters of a mile to north of the Portage Road.

Of the above list of village sites revised and listed to date, I have personally examined from Nos. 1 to 33 inclusive, and also numbers 40, 46, 54, and 55. The rest have been listed, with a view of future examination, as the information came in to me. As this information came through first-class reliable channels, it was noted down as received, and lately made into this list. Besides the above list, there are several other reported sites, of which the information is too incomplete or too scant to place them on this list. If good reliable information can be obtained about these last places, or visits made to them, and if they can be considered bona fide sites, they will be added to this list.

The period during which the writer became aware of these sites, visiting them, and collecting the relics, extended from 1875 to present day—at intervals. Almost all the material gathered by him has been given to the Provincial Museum at various dates, and numbered some thousands of specimens.

Years of cultivation have almost obliterated most of these sites, and relics are now difficult to get. It may also be stated that a very large proportion of these village sites were in existence before the advent of the white man, and therefore disclose no relics showing contact with white men. There seems to be an earlier occupation of Huronian or Iroquoian influence, and a later period of Algonquian influence, reaching down to the period of the settling of the country by the whites. It has also been suggested that earlier skill there was certain Eskimo influence, traces which remained in form of stone, adze blades, horn and bone tools, etc., and the discovery of walrus tusks, but the latter may have been brought to this section for trade purposes, just as well as the semi-tropical shells which were brought up to Western Ontario and the Huron country from the south-east Atlantic coast. This evidence of Eskimo contact has been noticed in other localities, too. It may be that this locality was on the border line, between the Huron-Iroquois and the northern Algonkin spheres of activities.

LOCALITIES WHERE RELICS HAVE BEEN FOUND, NOT NECESSARILY VILLAGE SITES.

1. John A. Torrey's, lot 15 and 16, Con. 5, Eldon; arrow heads, celts and a fine blade stone pipe of the Miemac or bottle stopper type. This place is on a hill almost surrounded by a swamp, with a creek to southwest.
2. Norman Robertson, lot 5, Con. 5, Verulam. This is immediately south of site No. 44, and may have been part of it. Some five or six skulls and some relics with them were found some years ago. Informant, Jas. Lithgow, License Inspector, Bobcaygeon P. O., letter of April 25th, 1912.
3. Jas. Lithgow, lot 9, Con. 6, Verulam: pieces of pipes, celts, and a mortar of pure white lime-stone, 16 by 24 inches, dressed inside and out (i.e., smoothed) have been found here.
4. A. Gilchrist, west $\frac{1}{2}$ lot 6, Con. 8, Eldon. Relics have been found here. Amongst them several stone pipes, one of which, a white stone (Steatite) pipe with a long stem and plain bowl of rather massive proportions, is now in the Provincial Museum.
Mr. Wm. Maxwell, in letter of April 29th, 1912, informs me that there were graves at this place, pipes and arrow heads being found.
5. Steven Ryan, east $\frac{1}{2}$ of lot 8, Con. 5, Laxton, south of Head Lake—relics of the ordinary sort have been found here.
6. Bolsover P. O., Eldon. This place is in the north-west corner of Eldon Twp., on the Talbot River, and the locality furnishes many relics of various sorts, some showing contact with white man, and others of a previous time. On lot 10, North Portage Road, Eldon, in the near vicinity, arrow heads are found when the wind blows the sand about. There is a local tradition of a battle between the Huron and Iroquois. This spot would be on the trail between Lake Simcoe and Balsam Lake, when Champlain took his war party of Hurons down the Trent waters to attack the Iroquois in 1615.
7. Beaverton and locality, on the east side of Lake Simcoe, in Thorah Twp., Ontario Co. In this locality many good relics have been found, comprising gouges, axes, slate knives, arrow heads, made out of a rose-coloured quartz, and a slate (Huronian, or other mottled yellow brownish stone) turtle amulet, much like a bird amulet, also several copper relics, and relics showing contact with white men, notably a brass pipe tomahawk, with a steel bit dovetailed into the brass blade, which was engraved, and the pipe bowl engraved. This latter relic was found near Gamebridge on the Talbot River.
8. Washburn's Island is on broken lots 13 and 14, Con. D., Mariposa. This is not an island, but a point of land running into Lake Scugog from its northern shore. Mr. F. D. Moore, K.C., of Lindsay, in a letter of April 20th, 1912, states that all kinds of relics have been found here on 5 or 6 acres near the shore of the lake, especially some fine specimen of flint, spear and arrowheads, and also some human bones. This place should be examined with a view of determining whether it is a village site or not.
9. Lot 9, Con. 3, Twp. of Smith, Peterborough Co., where F. D. Moore, K.C., of Lindsay, formerly lived, furnished arrowheads, gouges, etc. See letter 16th April, 1912.
10. Bridgenorth at Chemong Lake, Twp. Smith, at the foot of a place known as the "Green Hill" on the lake shore, and vicinity, furnished the relics given by F. D. Moore to the Provincial Museum, consisting of flints, sheet

copper (brass), arrowheads, native copper arrowheads, iron arrow heads, and a silver buckle or broach. See Ontario Archaeological Report, 1911; also letter April 20th, 1912.

11. Jutting into Balsam Lake from the south is Long Point of several miles in length, divided into two parts by the boundary line running east and west. The south part is in Fenelon Twp., and the north is in Bexley. Many relics of the ordinary kind come from here, including a beautiful long slender stone axe or pick, a grooved maul of limestone, ovoid in shape, and a human effigy pipe in dark grey soapstone, figure squatting.
12. G. R. B. Coates, Cambray P. O., in letter of 26th April, 1912, informs me that relics are found on his lot, No. 8, and south half of No. 9, Con. 1, Fenelon, and also in vicinity.
13. South-east corner lot 10, Con. 7, Bexley Twp., Abram Faulkner, is in a very hilly locality. On one side of the hill, facing south, near a spring, many relics and pottery fragments, also pipes, have been picked up at times for a number of years. This locality is known as the "French Settlement." This spot may be a village site and will be examined at the first opportunity.
14. R. H. Pearce, on east part of north $\frac{1}{2}$ lot 2, Con. 2, Bexley Twp., on a bench land on south side of Raven Lake, more recent relics have been found, such as traders' clay pipes, etc., also flint modules and chips. The spot is about 40 rods from lake shore, which is very marshy and is of marl formation. This spot may have been occupied by later Algonkins.
15. Mr. J. G. Glass, Customs collector, Lindsay, has collected flints (arrow and spear heads), also "skinning stones" on lots:
North west $\frac{1}{4}$, 16, Con. 5, Mariposa, on South east $\frac{1}{4}$, 15, Con. 6, Mariposa, and on South $\frac{1}{2}$, 15, Con. 4, Mariposa.
See letter of June 24th, 1912. This place is near Little Britain P. O.
16. On lots 5, 6, 7, 8, South Portage Road, Bexley, occupied now by Messrs. Edward and Frederick Lytle, settled by their father, some celts, etc., have been picked up, including a white soapstone pipe in form of a conventionalized animal's head, probably a moose, judging from the relatively large size of the muzzle.

Besides above places, there have been other places where relics have been picked up, either singly or in quantities in this group of townships, but of which I have very meagre details at present. There was a fine collection made near Beaverton, and taken to the west. Several large collections in Lindsay were sold to go to the States, and one was burnt. Some small local collections have been given to the Provincial Museum, but no data seems to have been kept as to where and how the relics were obtained. Whether they were grave finds, surface finds, or village site finds. I had examined the Beaverton and several of the Lindsay collections, but the owners could or would not give any data. They seemed to think that if they told where these relics came from, that they would be losing something tangible. I much deplore this secretive way of concealing knowledge, and at that time gave much publicity to what local archaeological work I was then undertaking—both by reports and newspaper articles, with the results that I became aware of a great many sites, and was presented with a large number of relics, which were placed in the Provincial Museum.

Two maps have been used in locating these sites. The first published by Mr. Tom Kains, P.L.S., and compiled by Jas. A. Patterson, C.E., in 1877.

giving the then owners of the individual lots, which has been a great help. The second map is published by the Times Printing Company, of Peterborough, 1910. This one does not give the names of owners of lots, but gives several additional Townships and lately created post offices, etc.

THE SNOW-SNAKE AND THE INDIAN GAME OF SNOW-SNAKING.

F. ONONDAGA LOFT, TORONTO.

In order to give the reader a clear conception of the nature of the game of snow-snaking which so interestingly engrosses the Cayuga, Onondaga and Sinaca tribes of the Six Nations, as a winter game upon the highways of the reserve, it will be necessary to preface the narrative by a description of the snow-snake and how it is made.

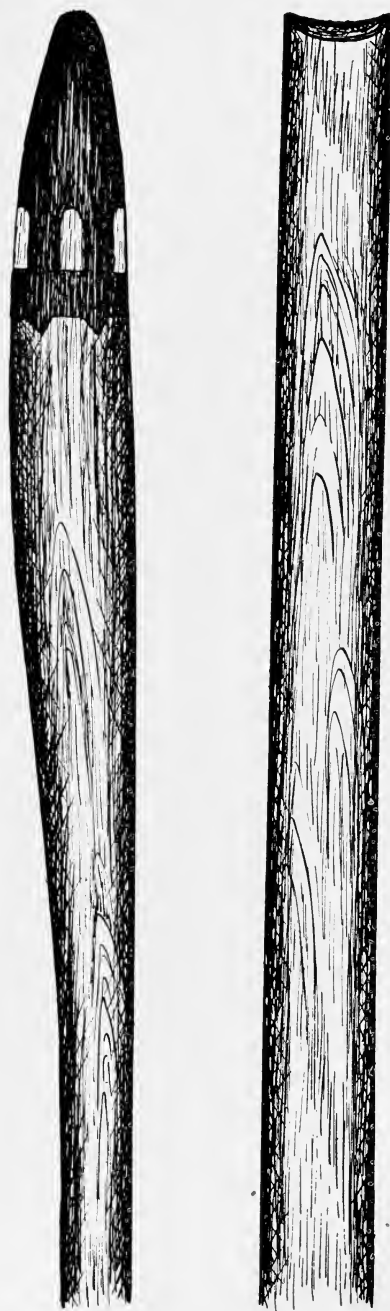
The word snow-snake is an Anglo-Saxon word descriptive of its appearance—mainly the head or point of it which is shaped exactly like the head of the reptile of that name and tapering to a thinness at the tail end of the timber. The Cayuga name for it is Ah-en-nah and the Mohawk Ah de lah wen tah. In no way do these Indian words apply as a meaning to the word snow-snake. They are as dissimilar as the snake is crooked in motion, and the snow-snake straight.

The wooden snake is hewn out and finally carved and whittled out of some of the finest timber that can be obtained, mainly the second growth of maple, hickory, or beach; or of lighter woods so long as its texture and flexibility in the finished state will stand the test of the strain it must perforce encounter at some time or other by plunging itself with great force into a stump tree or rail appearing as an obstacle in its swift course.

The snake is usually cut from ten to twelve feet long for the adults, and shorter for the younger generation. When the wood is shaved down almost to its final lines, it is placed over the stove in the house for several months so as to be thoroughly dried and seasoned before the finishing touches are applied and put in a highly polished state. One of the last things to be done is to mount the point or half the head with lead which is filed to a fine point. This process is to protect the timber from splitting or otherwise ruining the snake when coming in contact with an obstacle with great force. The weight of the lead is also an essential and a necessary adjunct in the process of manufacture to effect a complete equilibrium. The process of moulding the lead on the head is ingenious and original, pertaining to the Indian art of moulding jewelry into shape. The head of the snake is carved artistically, into which is poured the molten lead and when cooled is cut and filed to the desired shape, making a perfect and reasonably strong guard for the timber.

A snake is about three-quarters of an inch wide and half an inch in thickness on the body and tapering gradually at each end, with the head slightly elevated from the level plane. The tail end, which is taken in the fore-finger and balanced by the third and fourth finger when in the act of throwing it, is necessarily made very thin and flexible.

On a very straight and smooth course, and if the snake is successfully delivered by the force of an able-bodied man, it is possible to send it three to five hundred yards. Like everything else in sport or games it takes the expert to make a great performance, and there are many to be found in the ranks of the



Snow Snake.

exponents of this game of snow-snaking. Contestants may number twelve or more men in a party, each one pitted against the other for supremacy in the art and science of throwing them in respect of great distances.

Cold frosty days are the most desirable for a successful game as against the mild weather which tends to make the snow stick to the snake and thus retard its speed. During the progress of a game each player keeps his snake polished up to the highest possible smoothness by stroking or rubbing it from end to end with a piece of woollen cloth in which is placed a bit of melted beeswax.

I have noted in recent years that playing on the ordinary roads, which are necessarily crooked and irregular, has become undesirable to the lovers of the game. To overcome the obstacles that beset them, an ingenious device has been originated by some of them in making an improved roadway specially for the snakes.

Beside the highway a space is used for the purpose. A log with a diameter of about one and a half feet is pulled along the unpacked snow by a team of horses which makes a half-rounded course well adapted for an independent way for the snake. This idea also serves to protect pedestrians or teams from coming in possible contact with these snakes. To be pierced in the foot or leg by a snake going at its swiftest speed would mean a very serious injury. Again, it is possible that these snakes would be broken by teams or sleighs passing over them when it had come to a stand. Inasmuch as these playthings are dearly valued by the owners, they take every precaution to protect them by stationing a man here and there along the course to lift them out of the way of being trampled upon, but not a fraction of an inch must be deviated in its replacement to the former position in respect of the spot where the point rested.

Great enthusiasm and interest is manifested in the game during its progress. Usually there is a good stake wagered on the result of each throw. Apart from the outside wagers in favour of a choice, each contestant is likely to wager upon himself as well. The favoured custom, however, is for the players to pool the stake and he who throws the longest distance in any throw appropriates the pool.

The gentle womanhood of our Iroquois nation, who have been always so conspicuously identified with the social, economic, political and sporting life of the race, will be found taking a great interest in this popular winter game. I know of mothers, wives, and sisters whose enthusiasm will lead them to uncover their own selected magic—the choice of some particular wood, root, or seed of some plant—touch the snake with it as well as the arm of the favourite contestant, believing in its influence to associate success with him.

ABORIGINAL NET FISHING IN LONG POINT BAY.

BY CLAYTON MCCALL.

Owing to the abundance of food in its sheltered waters, Inner Long Point Bay probably teemed with more fish than any other part of the Attiwandaron country, and consequently its shores afford perhaps the best evidence of aboriginal net fishing in that region. Only the north shore of the bay has been examined for relics of that pursuit, both Turkey Point and Long Point Island being as yet unexplored for the same.

At the top of the bank on the MacInnes farm there was a fishing-station, proved by a few sinkers having been found among the arrowheads and bits of

pottery on the site. The bay being at the south, Cope's Gully on the west, and a branch of the same on the north, splendid protection from enemies was afforded. Several dozen sinkers have been picked up on the beach beneath, which shows that hauls were made from it.

About a half-mile west, at Woodward's Landing, considerable numbers of sinkers have been found. As pieces of pottery are sometimes discovered among them, and as no Indian specimens are on the cliff, the camp in connection with this fishing ground was probably on a flat of land which existed there until quite recently. Escape from enemies could have been made by means of canoes.

On the Becker farm, nearly a mile above Woodward's Landing, is a site bounded by the bay and a short ravine, with remains similar to those on the first-mentioned station. Although it is likely that a fishing ground was beneath, no proof of the supposition exists.

Several other small camps were also along the shore, on the cliff, but there is nothing definite to show that they were connected with fishing. Solitary sinkers are occasionally washed on to the beach almost everywhere, but it is doubtful if they mark the location of other fishing grounds.

Shape and weight were the chief considerations in choosing the raw material for sinkers, the former requirement being the more important. Sinkers are almost invariably flat, because such required only two nicks to hold them, by means of a thong, to the hempen nets, whereas cubical ones needed three or four. An example of this "emergency" kind is shown in Figure 5, Plate Of some four hundred specimens in the writer's possession, nearly all are longer than broad, but we must not infer that an oblong shape was necessary, because pebbles are usually worn so. The outline decided the position of the nicks, for, if any sinker is suspended from a cord tied through the notches, with the minor axis perpendicular, the two sections will, with but few exceptions, be seen to nicely balance each other.

As crooked sinkers are in the minority and are less artistic than symmetrical ones, the latter were perhaps the most popular and may be considered as the type. This symmetrical style can be divided into four classes as follows, the order denoting the relative proportion:

- | | | |
|--------------------------|---|--|
| Truly Elliptical | { | (a) Elongated. |
| | { | (b) More circular. |
| Approximately Elliptical | { | (c) One side curved more than the other. |
| | { | (d) Broader at one end. |



Fig. A.

Two questions now arise: Why were the sinkers balanced? and, why were the nicks made on the minor instead of the major axis? The answer to both lies in the manner of attaching them to the nets. If we imagined the sinkers to have been fastened, in any possible manner we please, with the major axis perpendicular to the border of the net, we can easily realize the awkwardness of this method; so in all probability each was firmly bound flat to the meshes at the bottom of the net



Fig. B.

with the longest edge resting on the border. Supposing this latter position to have been the one used, if the two sections of a sinker, especially of a heavy one, did not counterbalance, the tendency would have been to twist the net whenever a slight depression was reached, thus allowing fish to escape. If the nicks had been at the smaller ends, it is quite clear that this contingency would have been constantly occurring.



Fig. C.

In weight sinkers range from two ounces to a pound and three-quarters. All sizes being found promiscuously and the average weighing about nine ounces, it is apparent that first of all stones of that weight (being the most convenient) were chosen. The supply giving out, others were substituted as long as they were neither too heavy nor too light, and of course as correct in shape as possible.

With the exception of the nicks, no artificial work was ever put on the sinkers.



Fig. D.

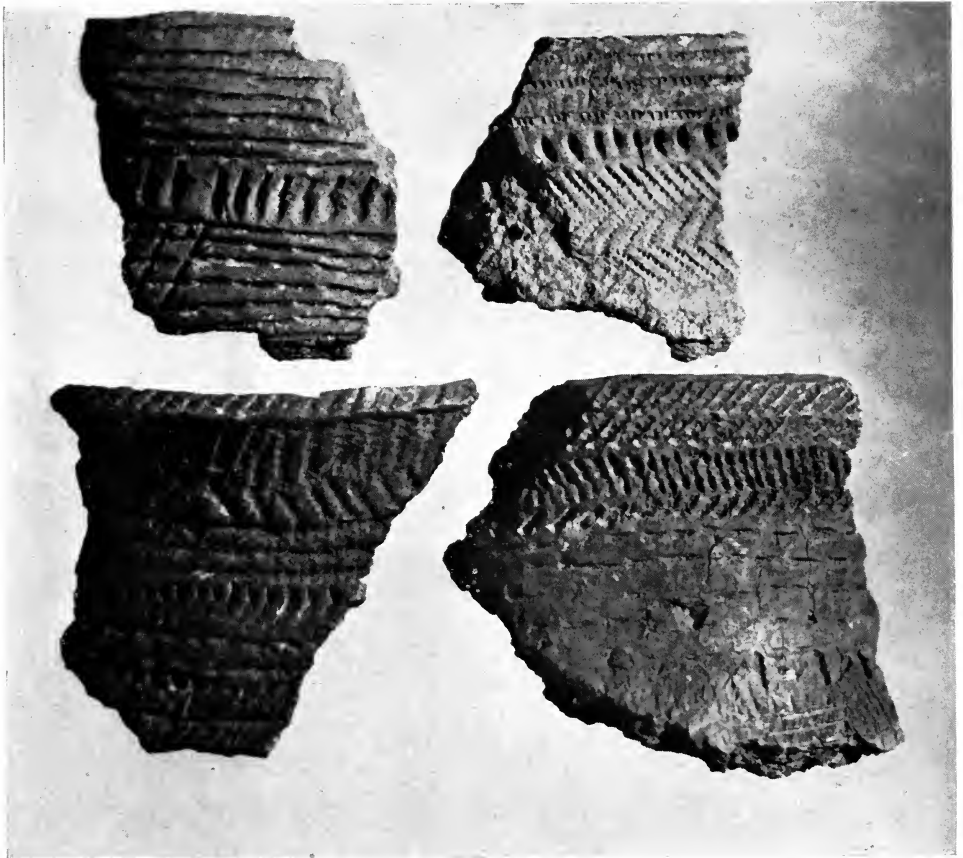


Fig. E.

INDIAN POTTERY OF PRINCE EDWARD COUNTY.

BY HELEN M. MERRILL.

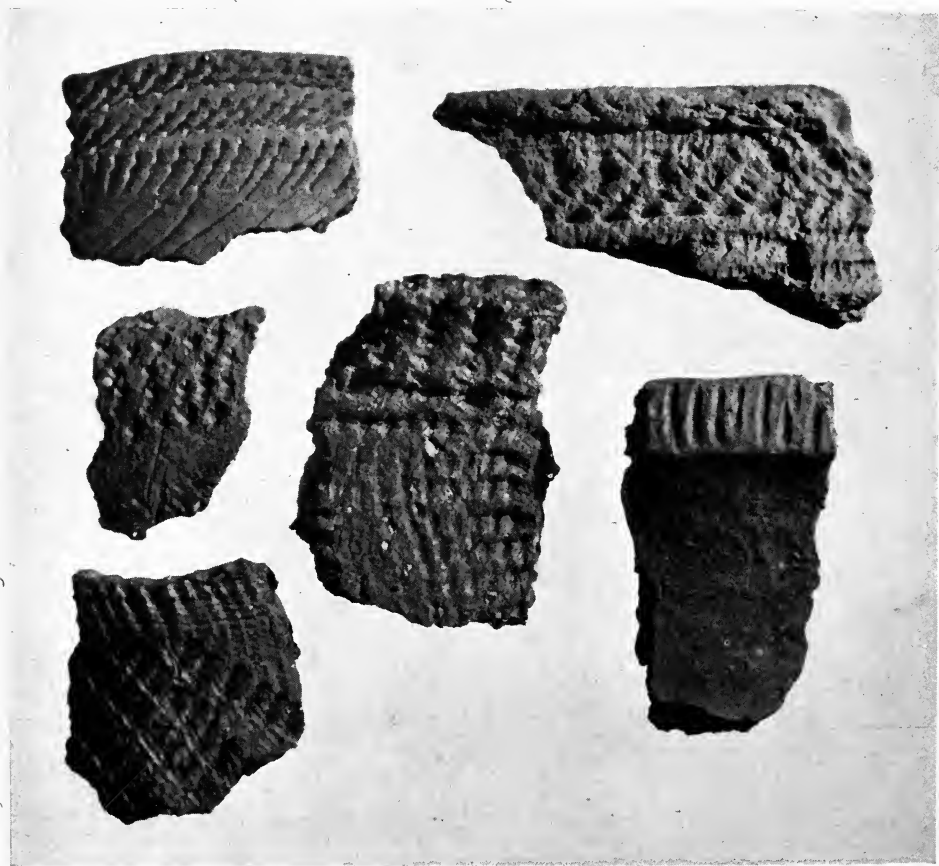
Few pastimes have I found as interesting as that of collecting Indian pottery, particularly where white drifting sand-hills range in wild beauty and fascinating loneliness from West Point to Wellington, in Prince Edward County. Five miles along the graceful curves of Great Sandy Bay, fine, pure sand has for centuries been washing out of Lake Ontario. Not only has it formed the shores of the bay, but it has separated West Lake from Lake Ontario and afforded at the same time, by drifting into hills, happy play-grounds for passing races of men. The sand-



hills, or Sandbanks as they are better known, are still what they have been since the early settlement of the county, a popular pleasure resort. Latterly they have attracted many persons from different parts of America who in summer come to spend an idle day or week or month by the shore. The breezy, practically barren sand-bar affords a pleasant driveway, on one side the crystal deeps of Big Sandy Bay in Lake Ontario, on the other the cloudy, reed-fringed, shallower waters of West Lake. Near Wellington is an outlet which, changing from year to year and with the seasons, is not always easily forded. Once I ventured to cross it. My horse was a young thoroughbred. The road led precipitously into two feet of flowing

water. A long drive from Picton *via* West Point, the last four miles by the wet shore sands, probably accounted for her taking the situation coolly and causing no accident. The following summer I approached the outlet from Wellington. It was as wide as an ordinary river and as formidable. A team bound for West Point was making a *détour* in Lake Ontario by a ridge of sand at no point visible above the water, a route beyond my venture.

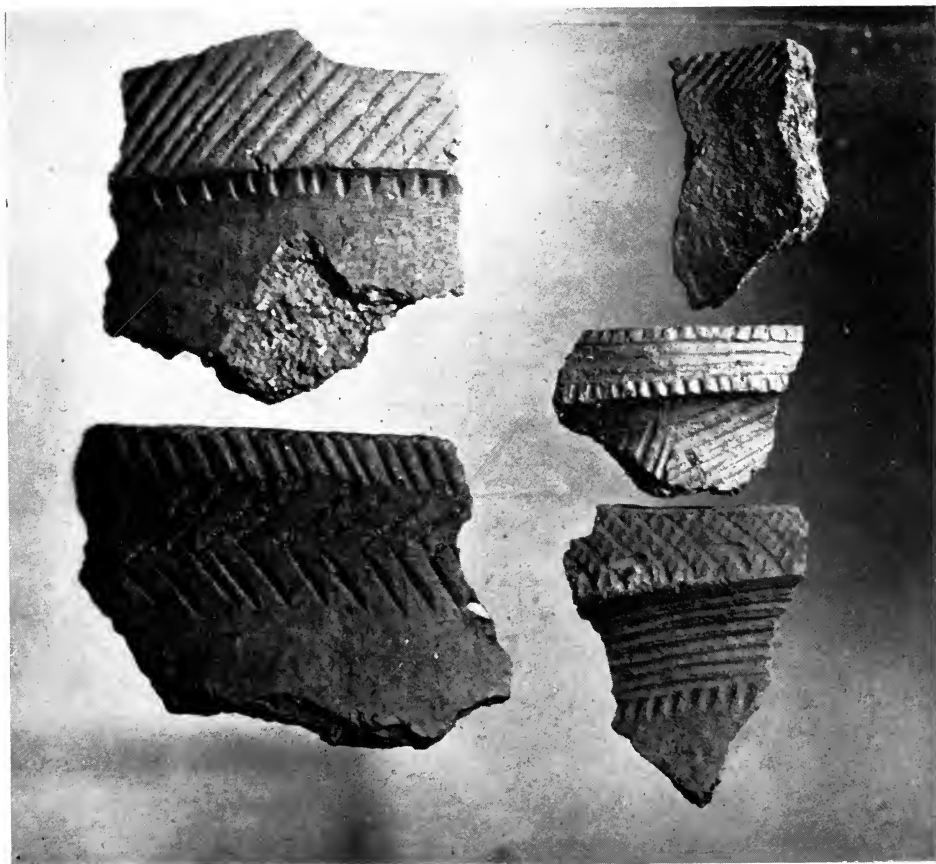
If an outline of this section of the county could be obtained as it appeared centuries ago, probably before any human being set foot on its shores, there is little doubt but that it would show West and East lakes as deep-set bays similar to South and Smith's bays on the opposite side of the peninsula. Traces of old sea



walls still exist on the inner shores of West Lake. Similar walls are probably to be found in East Lake which lies back of Little Sandy Bay in Lake Ontario, round West Point. A sand-bar again forms the line of separation between the smaller body of water (East Lake) and Lake Ontario. In this instance, however, the strip of land is thickly wooded for more than two miles with balsam, pine and spruce trees, among which winds a beautiful driveway. No wind enters here even when league-long breakers roar in from Lake Ontario, and it is delightful driving through the wood to hear the strange voice of surf, which seems to proceed from the heart of a forest so dense is the narrow belt of evergreens. At the present time

a picturesque outlet runs for a mile diagonally through the sand-bar, and the road crosses it over a substantial bridge. There are evidences still, it is said, of two outlets which at remote periods ran directly through the bar as does the one near Wellington.

While Indian relics have been found in various localities in the county, the collection of sherds, or fragments of pottery, which suggested this sketch was made at the Sandbanks. Near the shore and close by the wood at West Point where the hills begin, sheltered of late by a wind-break of willows to prevent further encroachment of sand in that vicinity, our attention was attracted a few years ago to several sherds. Appropriating them we searched in the sands, digging with small pieces of



driftwood. More were found and we returned at intervals, sometimes following a heavy wind which was likely to uncover a few good specimens which gave hints as to the location of others. To-day the store seems to be exhausted. Little more remains than traces of an ash-bed which indicates the site, possibly, of a lodge or other habitation, or of an open-air kiln.

When? and by whom? were the insistent questions as gradually the sands gave up their secret stores. It was a time of enchantment,—the sun and the wild wind, the surf on the beach, the absolute loneliness, the peculiar charm of the pervading influence of ancient days. Occasionally when resting for a moment and glancing

around a glimmer was caught of poplars along the lagoon, which heightened the effect, Indians attributing the restlessness of their leaves to their being haunted by souls of the departed.

So far as I know only sherds have been found here. Several years ago a pot was discovered in the hills remote from the shore. The nearest approach to a pot in my own collection is a rather large piece, a few handfuls of smaller ones, and several large edge pieces. The curves of the latter and the shape of the largest piece indicate a pot of no mean dimensions. On a rainy day they are as entertaining as a Chinese puzzle inasmuch as they ever resist falling into line in the shape of a pot. All through life we have our playthings. In childhood they include broken bits of modern china. When we are grown up, fragments of the red man's ancient ware are a pastime.

Although with all my hunting I have not yet found a pot, I feel quite recompensed by having secured nearly 50 decorated edge pieces, which represent as many differently ornamented pots; and there is always an *ignis fatuus* promise of a pot, such as coming across something "hard and smooth and round" in the sand, which is more or less stimulating even though it so far unfailingly has proved to be only a stone.

The pots represented by my collection of sherds were ornamented at the top, the decoration varying in depth from a half to four inches. A few have a row of short, slightly slanting creases round the edge inside, like fork prints round old-fashioned pies. Others have a crease running round in the rim. All markings presumably were made by bits of stone, bone or wood prepared for that purpose.

Of the forty odd patterns no two are alike. Many are fancifully ornamented, others slightly. Two have perforations in groups near the edge, which are obviously only ornamental, as they end in protuberances inside the pot. The minute impressions which in several instances ornament the lower portions of a pot outside, are the result, perhaps, of the clay having been moulded inside a basket for support, or of the use of malleating tools.

Beside diversity in decoration there is a marked difference in the thickness of the pottery, which varies from less than a quarter to over three-quarters of an inch, and also in color and texture, the latter owing in a measure to the fineness or coarseness of the granite or other broken stone which was always mixed with the clay. The color varies from grayish fawn to reddish.

When? and by whom? The questions are still insistent. As to the date of manufacture the Indian himself left no record better than his ware. He kept note of time presumably by his pipe and the moon. He had not, like the Buddhist, been brought up on figures. He had never dreamed of even an *Asankya*.

As to the potter, a history of Indian occupation of Prince Edward County and vicinity, together with a careful study of archæological material found at various points might be of avail in tracing him. For some time it has seemed to me that there should be compiled a history on Indian occupation of Ontario by a series of maps as well as by text which would cite not only notes by early explorers and missionaries, but odds and ends of data which may be gleaned from Indian traditions. Text relating to the red man is becoming less and less prominent in our histories. This is to be regretted. Indians hold too prominent a place among the makers of history in the early days of the province, for the present writers on history to afford to exclude them.

As late as 1800 Indians were numerous in and around Prince Edward County. A few years later the first surrender was made of land owned by the Mississauga.



Cross marks where pottery was found.

With the exception of the Mohawk and the Chippewa in Hastings County, the Missisauga appear to have been the only Indians then owning land in that district. Numerous surrenders of townships and parts of townships were made by them in Hastings, Addington and Frontenac counties in 1822, and several at other dates in Hastings, including four by the Chippewa in 1818. The Missisauga were a sub-tribe of the Chippewa, an Algonquian tribe. Big Island in the Bay of Quinté was surrendered in 1833 by the Missisauga, and *Waupoos* Island (*Wawboose*, rabbit skin) on the opposite side of the county in 1838. Near *Waupoos* Island a Missisauga reserve of 450 acres at the Rock, or Cape Vesey, a promontory 100 feet high, is said to have been surrendered in 1835. In 1856 all islands owned by them in the Bay of Quinté and at Weller's Bay also were surrendered. The Mohawk of the Bay of Quinté are of United Empire Loyalist extraction, and once owned all of Tyendenaga township, near Deseronto, under a grant from Governor Simcoe, 1793. Small lots of land have been surrendered by them.

While on the trail of the potter one would better bear in mind that by the middle of the 17th century the manufacture of pottery was on the wane and soon became a discarded art among Indians, owing to the fact that implements and utensils which they were in the habit of making were more and more plentifully supplied them by explorers, missionaries and traders.

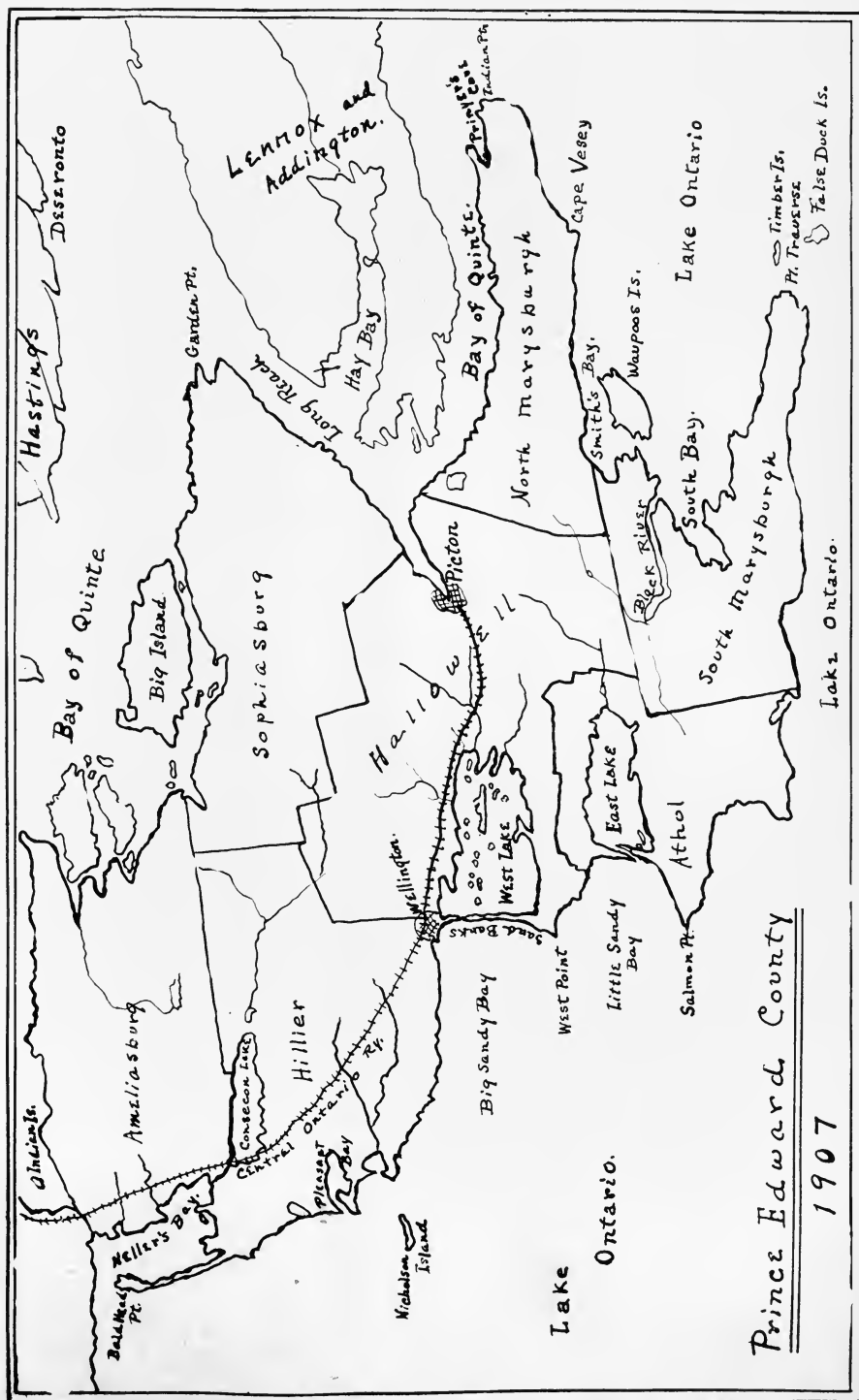
On maps and in earlier writings are records of Indian fortifications and villages in different parts of the county. The first settlement where Picton is now situated was made by Indians at the south end of the bay. To-day Picton is known to the Mohawk in Tyendenaga as *Jee-yoh-day-hoon-wawdaw-day* which means "at the head of the river." The bay at Picton is narrow and river-like. Several years ago a sherd was dredged from the bed of the harbor, and an arrowhead was found at Chimney Point where the store-house and wharf of the Richelieu and Ontario Navigation Company now stand.

On a knoll in a field overlooking the Little Swamp near Picton, is an interesting ash-bed, nor is it hallowed ground on account of its ancient stores. Yearly the field is ploughed and sherds turned in and out. Quantities of ashes are still easily distinguished from the sandy loam of the field. There is clay close by. The ash-bed is not on the crest of the knoll, but down the slope. The owner of the farm, a man over 80 years old, while spading out a few specimens for me in 1903, suggested as an explanation for its position, that perhaps when Lake Ontario was at a higher level than at present, the knoll was an island—shores of islands were favourite camping grounds. Considering the topography of the county and the similarity of pottery found in different localities, this seems highly improbable.

East of the Murray Canal lies Indian Island. Local tradition recounts a fierce battle fought there many years ago between hostile tribes. Near Massassaga (Missisauga) Point are several mounds.

Above the harbor at Picton, and the marsh, is the old Indian Carrying Place, or portage, to East Lake, which even prior to three centuries ago facilitated travel between the Bay of Quinté and the northern shores and regions of the county. Hunt as one may for trace of it, in Paradise Valley alone where hills converge near Glenwood cemetery and the passage is so narrow that it would be inconvenient not to set foot on it, is one sure that he is on the trail.

At the eastern extremity of East Lake is situated the picturesque village of Cherry Valley, which derived its name from a species of cherry which until the middle of the past century grew in abundance in that part of the county, particularly on the sand hills, and was found only there. The fruit was described by



Adam Kidd, an Irish poet, who visited the Sandbanks in 1828, as growing on small shrubs. It is now extinct. Its possible origin is obvious in the light of the fact that Sulpician priests established a Mission at *Kenté*, north of Wellington, not long after the arrival of the first of that Order from France in 1657,—a clump of *cerisiers de France* was found by the first settlers in the north of Simcoe county near the site of a Jesuit Mission. The Sandbanks and East Lake were in a direct line of travel over the old route from the Bay of Quinté to *Kenté*. Indian pottery has been found at Cherry Valley and elsewhere on East Lake.

The Bay of Quinté was so called presumably after *Kenté* for the same reason that Toronto River (now the Humber) the water on which Indians inhabiting the northern districts set out in their canoes for the aboriginal village of Toronto, was so named. Similar instances are to be found elsewhere in Ontario, such as the Montreal River which flows into Lake Temiskaming, a place of embarkation remote indeed from the point of destination on the St. Lawrence. East Canada Creek and West Canada Creek, tributaries to the Mohawk River in New York State, may also be cited. The Mohawk was a convenient route to Canada in days long preceding as well as at the time of the exodus of the United Empire Loyalists.

In 1668, according to reliable authority, a number of Cayuga and other Iroquois, with a few adopted Hurons emigrated from New York to the Bay of Quinté region. It would appear from various data that one of their villages, *Kenté* (from *ként* 'a'—field, meadow—an Iroquois word of which Quinté is obviously a French spelling) was situated at Weller's Bay, a place of beautiful shores protected by curving headlands from the sweep of wide waters. On the west lies the sand-bar known as Bald Head Point which is said to be one of the sites of *Kenté*. In 1847 this point, or bluff, appears to have been an island known as *Newegcewaum* (Bald Head). It belonged at that time to the Missisauga. The name, *Kenté*, obviously originated at a former site, possibly one of the fields cleared and cultivated by Indians who sojourned in the Quinté district previously to Champlain's arrival there. Numerous sherds have been found at Bald Head, as well as whole pots, wampum, arrowheads, beads, pipes, silver crosses and many other interesting relics. Skulls have also been discovered, one with an arrowhead piercing the temple, a gruesome thing to look upon; another with a hatchet embedded in it—evidence, possibly, of intertribal disturbance.

Perhaps the manufacturer of my own collection of fragments of pottery will be found to be of the Iroquois of *Kenté*. Perhaps he was of the Missisauga or some other Algonquian tribe—the Algonkin inhabited the region of country north of the Bay of Quinté preceding the coming of the Cayugas—or, it may be, that he belonged to a still more remote period.

OLD PENETANGUISHENE*

BY A. C. OSBORNE.

Penetanguishene, once the centre of British naval and military operations, and reminiscent of French occupation and the fur trade, is situated at the head of a beautiful bay of the same name, an inlet of the Georgian Bay, projected right into the land of the ancient Huron, of whose former domain Simcoe County now embraces the greater portion.



NOG-A-NISH.

A modern type of Missisauga Indian. Died at Byng Inlet, 1909, aged 104 years. Photo by permission of Mr. Emery, Byng Inlet.

The offspring of savage tradition—this euphonious name owes its origin to the sand dunes of the Tiny peninsula, on the western shores of the bay, which glisten like gold in the sun, and which, in the Indian tongue, are known as “Penetanguishene,” signifying, when freely translated, “The Place of the White Rolling Sands.” The bay, whose waters lave its banks, receives the same name, which is in turn applied to the town nestling on its shores. Penetanguishene, Hochelaga, Stadacona, with the hosts of striking aboriginal names, spread over

*From work now in press.

the Dominion of Canada and the continent of America, not only appeal to the imagination and excite a profound interest in the curiosities and limitations of the Indian dialects; they also stand as "imperishable Cenotaphs" in that grand galaxy of place-names, perpetuating the memory of long extinct nations, pointing to their pathetic history and fate. They likewise reveal the foot-prints of vanished races, innumerable as the sands upon the shore, who once roamed this vast wilderness lords of the soil. In these fantastic names savage tradition and modern enlightenment salute one another across remote centuries of time, as now discovery, development, the arts, and sciences clasp hands with each other.

This highly poetic and expressive name is claimed by local tradition to be of Abenaki origin, a dialect of the great Algonquin family which once occupied the region extending from the Atlantic Ocean to the Rocky Mountains, north of the St. Lawrence River and the great lakes, and was already here when the Huron savage appeared on the scene. The A-ben-a-ki and their dialects are now confined mainly to New Brunswick and the Maritime Coasts, and Penetanguishene, slightly modified by the exigencies of changing dialects, is one of the few names—melancholy relics, sparsely scattered here and there north of the great lakes—which remain to tell of A-ben-a-ki occupation. Strangely enough, Penetanguishene and Cataraqua (Kingston) are the only two names of the Abenaki dialect remaining in Ontario which remind us of the passing of this once powerful branch of the great Algonquin race. It is said "there are slippery places in Indian philology," which admonish us of the "uncertainty of tribal divisions and dialect derivations." Still, there are many facts in the history of these tribal changes and local tradition which furnish abundant evidence confirming the theory of this origin. Edward Jack, an authoritative writer on Indian lore, who spent his life in the forest with the Indians, especially the Abenaki, says he frequently heard words and phrases from the Abenaki language used by the Ojibways on the shores of Lake Superior. Again, some few years ago, two or three Abenaki families migrated from New Brunswick to work in the lumber regions of Muskoka, and when conversing on the subject they always claimed that this was formerly the stamping ground of the Abenaki race, and local tradition agrees in strongly supporting their claim. The present form of "Penetanguishene" is Ojibway, and like Cau-da-ra-qua (Kingston), which has no less than thirty-nine variant spellings, its orthography has undergone numerous changes, though not so many. Among the variations may be noted Penetangoushene, Penetanctoshene, Penetanctshene, with an extended list still undiscovered.

Penetanguishene Bay first became known to white men when in August, 1615, that intrepid adventurer, Champlain, and his French Voyageurs landed at Outouacha Bay (now known as Colborne Bay or Northwest Basin), on the western shores of the bay, on an expedition of discovery and exploration in the Huron country after an arduous journey of over nine hundred miles from Quebec up the St. Lawrence, Ottawa and Mattawan rivers, across Lake Nipissing, down the French River and the island of the Georgian Bay, making the trip in frail canoes and over innumerable difficult and unfamiliar portages. The Penetanguishene Bay was known several years previous to the first visit of French traders to Toronto Bay, as only in 1735 was Fort Rouille, on the present site of Toronto, established. Situated near the shores of Outouacha Bay was the Huron town of Otouacha, with a population of several hundred souls, whose inhabitants hailed the advent of the strangers with joyful acclaim and dispensed savage hospitality with a liberal hand. This locality was later to attain historical notoriety as the centre of thrilling

events connected with the Huron missions of the Jesuits. Proceeding westward, calling at Carmaron and two other Huron towns on the way, Champlain arrived at Carhagouha, a Huron town with a population of about two thousand Indians, enclosed with triple palisades thirty-five feet high, situated somewhere in the vicinity of Lafontaine. Here he met the Recollet, Father Caron, who had preceded him a few days with some Frenchmen, and together the company knelt at a temporary altar and celebrated the first mass in the Huron country. Champlain, in the course of his journey, visited Touaguainchain, the nearest Huron prototype of Penetanguishene, situated near the head of the bay, then several other villages on the way. The party continued their progress, passing through a succession of native towns till they reached Cahiague and the Narrows, near Orillia. Here we leave Champlain busied with his commissariat preparatory to his second expedition against the Iroquois. Champlain's history and career are familiar to all and need not be further repeated.

Father Martin located the former site of Ihonatiria, on the banks of a small stream falling into Outouacha Bay and some distance above its shores. There is a slight difference of opinion among archaeologists as to its exact location, but until the question is authoritatively decided to the contrary we must assume Father Martin's view as the correct one. At Ihonatiria the first Jesuit Mission was established by the heroic Brebeuf in 1634, and called the Mission of St. Joseph. This was the opening scene in that great wilderness drama of the Jesuit Huron Missions of seventeen years, during which struggling missions were established in many Indian towns and villages, entailing untold hardship, suffering, and death. The main Central Mission House of St. Marie I. (Old Fort), on the River Wye, near the town of Midland, was built in 1639, and the mission ten years later culminated in the bloody conflict of St. Louis and the terrible tragedy of St. Ignace, in which Brebeuf and his companion perished. Then followed the building of St. Marie II., on Christian Island, to which the mission was removed, and the final dispersion took place in 1650-1. In commemoration of these thrilling events, and in honor of these devoted pioneer missionaries, the corner stone of the Memorial Church at Penetanguishene was laid in 1886, and the edifice erected, in a great measure, as a national memorial.

An interregnum of one hundred and ten years followed, during which the "land of the Huron," relegated to the wild beasts of the forests only, when the silence and desolation were broken by an occasional Iroquois hunter, was devoid of history and almost without tradition. The conqueror, the exultant Iroquois, in turn gave way to the Ojibway of the north by whom he was gradually replaced, and who ruled lords of this domain till the conquest and the advent of the British upon the scene in 1759, which changed the course of savage empire. Five years later Alexander Henry, the famous traveller and fur-trader, passed over these waters with his savage captors in 1764, on his way to Niagara and liberty when the Indian braves made a treaty of amity with Sir William Johnson.

THE CONSERVATION OF ARCHAEOLOGICAL EVIDENCES.

HARLAN I. SMITH.

The conservation of archaeological evidences consists in preserving them all unimpaired where they may be available to the workers who use this method of reconstructing prehistoric cultures. This we would take for granted were it not that laws prohibiting the exportation of antiquities are frequently presented to legislative bodies while the destruction of archaeological evidences by untrained excavators grows apace.

The passage of laws preventing the exportation of archaeological specimens, especially from such countries as Canada and the United States, is contemptible. There may be some excuse for such laws in certain countries, as, for instance, Egypt, Greece, Italy, and Mexico, but few specimens are found in Northern America so unique or rare that many more like them may not be found through serious and careful exploration, and these would replace any which are taken out of the country.

Practically, where archaeological specimens are exported from a country by foreign archaeologists, the people of that country are benefited, for the true archaeologist seldom explores a country which is being thoroughly cared for by its own countrymen, and these countrymen are benefited in as much as the explorations are conducted at the expense of others, and they secure by means of reports and otherwise the knowledge resulting from the explorations.

For example, I have known of a great shell heap covering many acres, and in places reaching a height of nine feet, which had never been explored systematically, and from which very few specimens had been taken, except those uncovered by road builders. No attempt was made by the people of the country in which the shell heap was located even to properly preserve, label, and publish these specimens. A foreign expedition sent one of its men there to carry on work with a staff of five men, including at least three of scientific training and ability, and caused explorations to be conducted, chiefly in one spot, for a period of not less than a month, and finally published the results of the exploration, illustrating, by means of drawings and expensive reproductions of photographs, practically all the different objects found. Then objection was raised by the people of the locality who had so long neglected their opportunities. They even endeavored to get a law passed to make it illegal for foreigners to remove antiquities from their country. One man interested in science inquired if anything more could be found at the site, and seemed to feel with resentment that everything had been taken out of his country. As a matter of fact, the shell heap is so large, covering, as it does, several acres, that it is unlikely that it will ever be completely dug away. Judging from the number of specimens found in a month's work, scores of similar collections could be made from that one shell heap, and there are many hundreds of shell heaps in this same country. The excavation made by the expedition, while large in itself, was exceedingly small in proportion to the acres of heap left undisturbed.

Since this time, a period of considerably over ten years, the people of that country have made no systematic exploration of the site, or if they have, have not published their results or even communicated them to scientific men, and consequently they would have no complete knowledge of it, and no complete series of specimens from it, had not the institution of the foreign country been some-

what generous. The foreign expedition not only presented a copy of its publications, describing the place and the antiquities found therein, to every great country in the world, but sent copies to the libraries and learned societies of the country explored, in particular the government and university libraries in the vicinity of the shell heap. Moreover, casts of the specimens and duplicate specimens themselves were supplied, in exchange, to the country in which the explorations were conducted.

The surface survey of Blandford Township, Oxford County, Ontario, a township taken at random, carried on by Mr. W. J. Wintenberg, resulted in the location by this one man of twenty-six lodge and village sites, five burial places, and many surface finds. The township is less than thirteen miles long and barely nine miles wide, an area much smaller than one hundred square miles. Less than nine field working days resulted in these discoveries. This makes a find of more than three sites per day. More time or a greater number of observers would no doubt have developed even more sites and material. As there is no reason to consider this township especially favorable for prehistoric occupation, it being in the midst of Ontario, and not bordering a great lake or having a very large river, we may conclude that the other townships in the area (common to Southern Ontario, the cleared forest area, the St. Lawrence lowlands, and the Iroquoian linguistic area) would average just as productive. We may expect some to be more barren of archaeological remains, but others, those located on lakes or including special features, such as quarries or rich corn lands, to far surpass it in archaeological productiveness. It thus seems that there is ample material in this whole area for all archaeological workers and for both our own and foreign museums.

If the archaeologists of a country are conducting satisfactory explorations, foreigners will seldom come and explore in that country, but will content themselves with reading the reports, and confine their explorations to other regions which are not being properly explored. When they come to need specimens to give exposition to the public of archaeological facts regarding that country, they will send for duplicate specimens, endeavoring to obtain them by exchange or purchase. If obtained by exchange, valuable material for a similar purpose is returned, saving the expense of exploration, and with the additional economy that the duplicates of both are made useful. If they are secured by purchase, the money may be used for exploration where most needed. Casts and even illustrations, if arranged to bring out an idea, rather than to show a series of curiosities, may do more good in educating the citizens of a country, than a few unrelated, although unique, and financially valuable specimens.

People are continually digging up archaeological specimens, sometimes in the course of agricultural pursuits, sometimes where roads, railways, canals, irrigation ditches, and the like are being constructed. The knowledge regarding these specimens is seldom preserved, even in manuscript, and is soon forgotten. Conservation of archaeological knowledge would consist in the publication of these facts, and the distribution of these publications to the libraries of the interested countries of the world. By this means the facts are sure to be saved even if the manuscript should be burned, or a single published account be lost, for if one library burns, others have the publication which may be copied or reprinted.

The exploration of a site by untrained men is too often in the spirit of adventure, and the mound, village site, or what not, is destroyed by those who do not put on record their results, so that no serious or trained archaeological worker can ever explore it and give to the world the facts.

Specimens disturbed by such people, or even those collected by archaeologists, are too often carelessly kept, sometimes without even being catalogued, so that the data regarding them is sooner or later lost, and practically never available to those archaeologists who are really doing serious work. Even in museums, specimens are too often allowed to be broken by the careless handling of untrained subordinates, ruined by the ravages of insects, by violent changes of temperature and moisture, and by the damaging effects of allowing the sun to shine on such specimens as are made of shell, antler, and bone. All this is also a waste of money. The conservation of archaeological evidence would include the numbering and cataloguing of these specimens, so that the numbers should not be effaced, and so that if one catalogue were lost or destroyed, as for instance by fire, another would be available. Men should be trained as preparators, cataloguers, and caretakers, so that there should be, instead of untrained and careless people handling and caring for the specimens, a sufficient number of persons from whom may be drawn those to properly number and catalogue the specimens, as well as to see that other things are done, as, for instance, the drawing of curtains when in the course of the day the sun reaches such a position that its rays tend to destroy such objects as those made of antler and other materials which are easily damaged by the sunshine.

It may better conserve the antiquities of a country to let them lie a few years longer where they have been for many years beneath the surface of the ground than to allow them to be excavated by an inexperienced or unskilled person, or one who fails to place his material results on free public exhibition, and to carefully publish these results, where they may be available to all students. At present there is such great lack of well-trained archaeological field workers that comparatively little field work should be attempted, and funds should not be made available for exploration faster than men can be trained to wisely expend them.

It should be remembered that we of to-day often look upon the archaeological results of a generation ago as of little or no value, but regret that we have not the opportunities of that time to examine the unimpaired archaeological evidences enjoyed by the earlier workers; at the same time we clamor for conclusions to the exclusion of descriptive details. Have we to-day any greater right to expect our bare conclusions to be of value than had those others, and is it not our first duty to keep our conclusions and theories distinctly separate from the facts, and to record the facts in such a way, so that our conclusions may be checked or revised?

The conservation of archaeological material seems clearly to consist, not in passing dog-in-the-manger laws, but in preventing, so far as possible, all excavation of the archaeological sites by untrained excavators: in the now most unheard of careful cataloguing by trained clerks of specimens. in the proper care of these by specially skilled mechanics, in the publication of the results of excavation, and in differentiating clearly between our facts and our theories.

ADDITIONS TO THE MUSEUM, 1912:

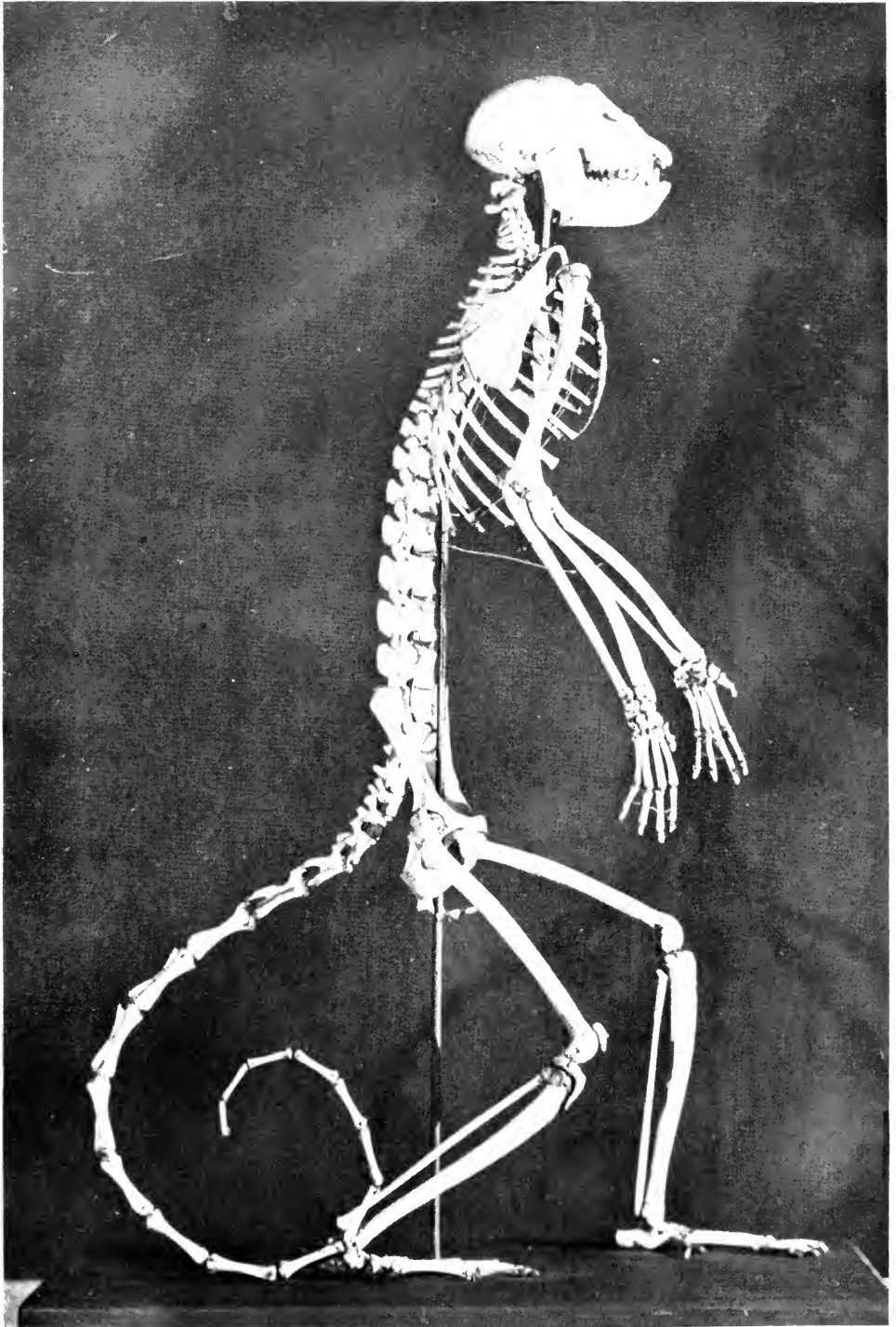
COLLECTION OF W. F. & L. C. CLARK, PETERBOROUGH, ONTARIO:

- 31383—Banner Stone, Glen Morris village, North Dumfries.
- 31384—Banner Stone, West William Twp., Middlesex County.
- 31385—Banner Stone, Otter River.
- 31386—Fish Amulet, Lobo Twp., Middlesex County.
- 31387—Gorget, Glenheim Twp., Oxford County.
- 31388—9—Gorget, Otto River.
- 31390—Gorget, Essex County.
- 31391—Gorget Broken, Blenheim Twp., Oxford County.
- 31392—Gorget Broken, South Dumfries.
- 31393—Slate Axe, Lobo Twp., Middlesex County.
- 31394—Stone Axe, Ailsa Craig, Middlesex County.
- 31395—Stone Axe, Cobourg.
- 31396—Stone Axe, Middlesex County.
- 31397—8—Stone Axes, North Dumfries.
- 31399—Stone Axe, Oneida Twp.
- 31400—Stone Axe, North Dumfries.
- 31401—Stone Axe, Ayr, Ontario.
- 31402—3—Stone Axes, North Dumfries.
- 31404—Stone Axe, South Dumfries.
- 31405—Stone Axe, Oneida Twp.
- 31406—Stone Axe, Glen Morris, North Dumfries.
- 31407—Stone Axe, Rice Lake, Peterborough County.
- 31408—Stone Axe, Oneida Twp.
- 31409—Stone Axe, North Dumfries.
- 31410—Stone Axe, from grave, Kentucky, U.S.A.
- 31411—Stone Axe, Maysville, Kentucky, U.S.A.
- 31412—Stone Axe, North Dumfries.
- 31413—9—Skinning Knives, Oneida, Twp.
- 31420—Skinning Knives, Otter River.
- 31421—5—Skinning Knives, North Dumfries.
- 31426—Worked Stone, near Guelph, Wellington County.
- 31427—33—Field Stones, some partly worked, used for gambling, N. Dumfries.
- 31434—Field Stones, some partly worked, used for gambling, Oneida Twp.
- 31435—Field Stones, some partly worked, used for gambling, Cobourg.
- 31436—7—Field Stones, some partly worked, used for gambling, Ailsa Craig.
- 31438—Clay Pipe, Ohio.
- 31439—Clay pipe, North Dumfries.
- 31440—Clay pipe, North Dumfries.
- 31441—Clay pipe, stem, South Dumfries.
- 31442—54—Pieces of Clay pipe bowls and stems, North Dumfries.
- 31455—Stone pipe, Otter River.
- 31456—Stone pipe bowl, partly worked, North Dumfries.
- 31457—Copper Axe or chisel, Ohio.
- 31458—Copper spear head, near Chemong Lake, Peterborough County.
- 31459—Copper arrow or spear point, Sugar Island, Rice Lake.
- 31460—Copper implement, North Dumfries.
- 31461—Broken Catlinite pipe bowl, Oneida Twp.
- 31462—Bone skin dresser, British Columbia.
- 31463—4—Piece of pottery, Ohio.
- 31465—90—Piece of pottery, North Dumfries.
- 31491—501—Piece of pottery, North Dumfries.
- 31502—Flint mounted to show its use, North Dumfries.
- 31503—Arrow point mounted to show its use, North Dumfries.
- 31504—Flint mounted to show its use, Brant County.
- 31505—Flint spear head, Brantford.
- 31506—13—Flint and quartz arrow, spear heads, and drill, York Co., S. Carolina.
- 31514—23—Quartz spear and arrow heads, York County, S. Carolina.
- 31524—5—Quartz and jasper spear points, Talbot County, Georgia.
- 31526—7—Flint arrow heads, Jackson County, Ill., U.S.A.
- 31528—9—Flint arrow heads, Washtenaw County, Michigan.
- 31530—Flint knife mounted to show its use, Washtenaw Co., Michigan.
- 31531—3—Flint arrow heads and drill, Maysville, Kentucky.
- 31534—5—Quartz arrow points, Georgia.

- 31536-7—Quartz arrow points, Virginia.
31538—White flint arrow-point, Montgomery Co., Montana.
31539—Flint arrow point, Hamilton County, Ohio.
31540—Flint arrow point, Southern Illinois.
31541-3—Flint arrow points, Ailsa Craig, Ontario.
31544-5—Flint arrow points, Paris Ontario.
31546—Flint arrow point, London, Ontario.
31547—Flint arrow point, Ayr, Ontario.
31548—Flint arrow point, Otter River.
31549—Flint arrow point, West's Corners, Ontario.
31550—Flint spear point, near Brinsley, Ontario.
31551—Flint spear point, Middlesex County, Ontario.
31552-3—Flint spear arrow point, Waterloo County, Ontario.
31554—Flint arrow point, Galt, Ontario.
31555—Flint arrow point, West Williams, Ontario.
31556-61—Flint arrow points, locality not known.
31562—Flint spear point, London Twp., Middlesex County.
31563—Flint spear point, Blenheim Twp.
31564—Flint spear point, Kentucky.
31565-641—Flint spear and arrow points, North Dumfries.
31642-709—Flint spear and arrow points, Oneida Twp.
31710—Slate gorget, small, crenated ends, Oneida Twp.
31711—Shell wampum, mound, Putnam County, Ill.
31712—Stone wampum, Lanark Co., Ontario.
31713—Shell wampum, found in grave, Genesee County, N.Y.
31714-25—Flints from mounds in Oneida Valley, Haldimand Co.
31726-30—Flint arrow and spear points, Otter River, Ontario.
31731—Flint scraper.
31732—Flint arrow point, South Dumfries Twp.
31733—Flint arrow point, Brant Co.
31734—Flint arrow point, London Twp.
31735—Flint spear point, Lobo Twp.
31736—Flint scraper, Lobo Twp.
31737-48—Flint arrow points, Waterloo County.
31749—Flint spear point, Greene County, Ohio.
31750-52—Flint and quartz spear points, South Carolina.
31753-67—Flint arrow points, Waterloo County.
31768—Slate gorget, Waterloo County.
31769—Flint drill, North Dumfries.
31770-1—Flint drills, Oneida Twp.
31772—Unio shell, North Dumfries.
31773—Piece of broken slate gorget, Otter River.
31774—Unio shell, North Dumfries.
31775-7—Teeth, North Dumfries.
31778-9—Small shells, North Dumfries.
31780—Bone needle, North Dumfries.
31781—Bone awl, North Dumfries.
31782—Shell wampum, North Dumfries.
31783—Carved bone armlet, North Dumfries.
31784—Bone bead, North Dumfries.
31785-97—Bone awls, North Dumfries.
31798-£—Bone arrow points, North Dumfries.
31800—Bone head, North Dumfries.
31801—Bone pipe, North Dumfries.
31802—Animal tooth, North Dumfries.
31803—Human tooth, North Dumfries.
31804-6—Gambling bones, North Dumfries.
31807-23—Bone awls, North Dumfries.
31824-35—Bone beads, North Dumfries.
31836-43—Broken pipe stems, North Dumfries.
31844—Piece of flint drilled, North Dumfries.
31845-60—Foot bones, North Dumfries, probably gambling bones.
31861—Skull, deformed, Middlesex County.
31862—Lower jaw, Middlesex County.
31863-6—Human bones, Middlesex County.
31867—Fossil, Oneida Twp.
31868—Two pieces of bone, one animal tooth, North Dumfries.

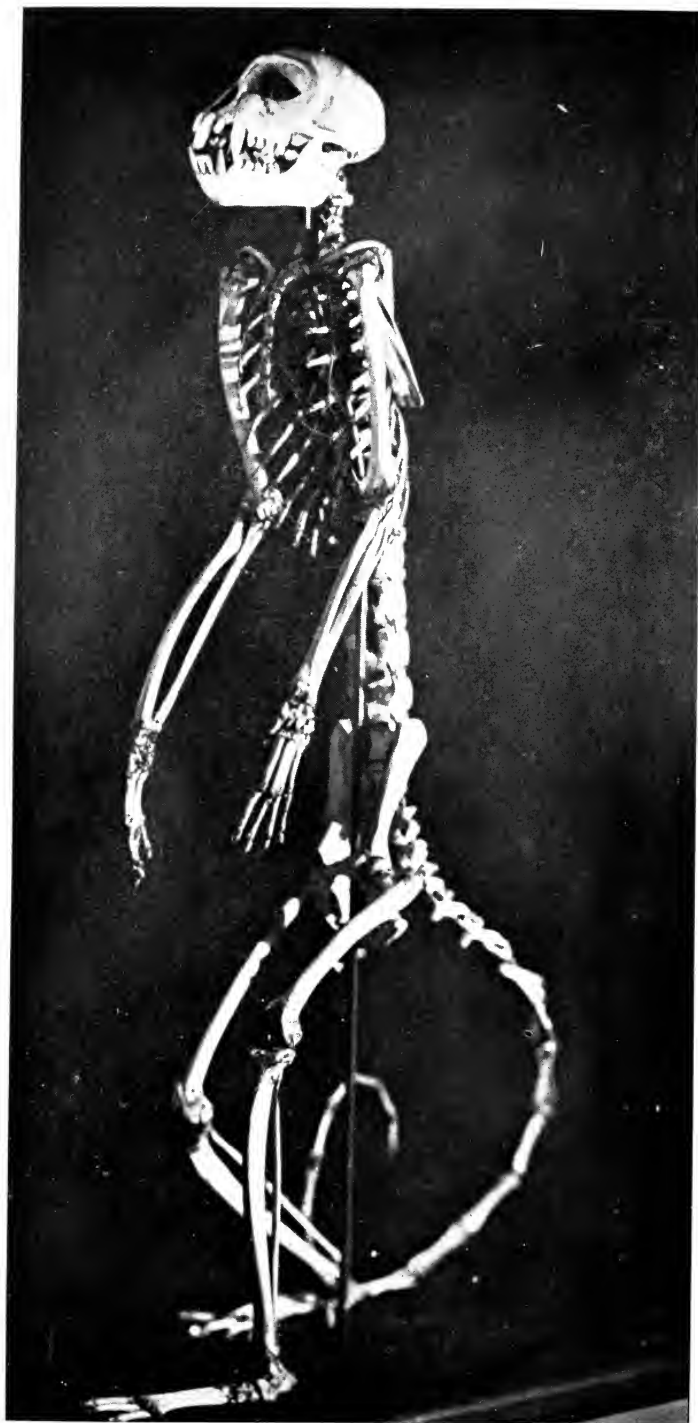
- 31869—Small stone axe, Kansas City. Gift of Miss S. Pulford.
 31870—2—Flint arrow points, Kansas City. Gift of Miss S. Pulford.
 31873—Stone net sinker, Port Rowan, L. Erie. Gift of Clayton McCall.
 31874—Stone net sinker, Port Rowan, L. Erie. Gift of Clayton McCall.
 31875—Stone net sinker, Port Rowan, L. Erie. Gift of Clayton McCall.
 31876—Stone net sinker, Port Rowan, L. Erie. Gift of Clayton McCall.
 31877—89—Stone net sinkers, Port Rowan, L. Erie. Gift of Clayton McCall.
 31890—Snow snake, Brantford Indian Reserve. Gift of F. O. Loft.
 31891—Zulu shield, South Africa, Gift of Sam Herbert.
 31892—Arrow head, Lot 13, Con. 6, Blenheim Twp.
 31893—95—Pieces of pottery, Lot 13, Con. 6, Blenheim Twp.
 31896—Wampum head made from Unio shell, N. Dumfries Twp.
 31897—Flat fragment of bone, Elliot Village site, N. Dumfries Twp.
 31898—Bone head, Lot 10, Con. 2, Wilmot Twp.
 31899—Bead, Elliot Farm, North Dumfries Twp.
 31900—Bone awl, Elliot Farm, North Dumfries Twp.
 31901—Bone awl.
 31902—Charred corn, Lot 10, Con. 2, Wilmot Twp.
 31903—Sioux Indian war drum, captured during Reil Rebellion, near Battleford. Gift of Frank Yeigh.
 31904—Decorated Buffalo skull used by the Soto Indians in their Sun Dance Ceremonies. Gift of Frank Yeigh.
 31905—Leather bucket, found in the Old Fort. Gift of Frank Yeigh.
 31906—Long (pestle shaped) stone, mountain near Nelson, B.C. Gift of W. J. Armstrong.
 Note.—31907—31910: By exchange with the Smithsonian Institute, Washington.
 31907—Plaster bust of Jno. Grass, Teton Sioux.
 31908—Plaster bust of Charlie Waghrigi, Osaga.
 31909—Skull of a male Perunian showing marked frontal, with moderate occipital depression. (Pachacamac, Peru).
 31910—Skull of a male Perunian showing very slight frontal and occipital depression.
 31911—Buffalo skull. Gift of Jas. Warren, Walkerton, Ontario.
 31912—Buffalo horn. Gift of Jas. Warren, Walkerton, Ontario.
 31913—Antler (Mule deer). Gift of Jas. Warren, Walkerton, Ontario.
 31914—Pair antlers (Prong horn antelope). Gift of Jas. Warren, Walkerton, Ontario.
 31915—Rib. Gift of Jas. Warren, Walkerton, Ontario.
 31916—Vertebrae (Buffalo?). Gift of Jas. Warren, Walkerton, Ontario.
 31917—Gorget or breast plate (shell). Gift of Jas. Warren, Walkerton, Ontario.
 31918—Ground axe. Gift of Jas. Warren, Walkerton, Ontario.
 31919—Ground axe. Gift of Jas. Warren, Walkerton, Ontario.
 31920—Fragment of Ground axe. Gift of Jas. Warren, Walkerton, Ontario.
 31921—Stone Gouge. Gift of Jas. Warren, Walkerton, Ontario.
 31922—Stone Gorget. Gift of Jas. Warren, Walkerton, Ontario.
 31923—Stone Gorget. Gift of Jas. Warren, Walkerton, Ontario.
 31924—Stone Gorget. Gift of Jas. Warren, Walkerton, Ontario.
 31925—Water washed pebble. Gift of Jas. Warren, Walkerton, Ontario.
 31926—Stone pestle. Gift of Jas. Warren, Walkerton, Ontario.
 31927—Stone pestle. Gift of Jas. Warren, Walkerton, Ontario.
 31928—Stone axe or adze. Gift of Jas. Warren, Walkerton, Ontario.
 31929—Stone axe or adze. Gift of Jas. Warren, Walkerton, Ont.
 31930—Stone axe or adze. Gift of Jas. Warren, Walkerton, Ont.
 31931—Stone axe or adze. Gift of Jas. Warren, Walkerton, Ont.
 31932—Stone axe or adze. Gift of Jas. Warren, Walkerton, Ont.
 31933—Stone chisel. Gift of Jas. Warren, Walkerton, Ont.
 31934—Stone chisel. Gift of Jas. Warren, Walkerton, Ont.
 31935—Stone chisel. Gift of Jas. Warren, Walkerton, Ont.
 31936—Stone pestle. Gift of Jas. Warren, Walkerton, Ont.
 31937—Soap stone pipe. Gift of Jas. Warren, Walkerton, Ont.
 31938—Stone pipe. Gift of Jas. Warren, Walkerton, Ont.
 31939—Tomahawk Metal. Gift of Jas. Warren, Walkerton, Ont.
 31940—Tomahawk Metal. Gift of Jas. Warren, Walkerton, Ont.
 31941—Old metal knife bone handle. Gift of Jas. Warren, Walkerton, Ont.
 31942—Old metal knife bone handle. Gift of Jas. Warren, Walkerton, Ont.
 31943—Flint spear head. Gift of Jas. Warren, Walkerton, Ont.
 31944—Flint spear head. Gift of Jas. Warren, Walkerton, Ontario.
 31945—Flint spear head. Gift of Jas. Warren, Walkerton, Ontario.
 31946—Flint arrowhead. Gift of Jas. Warren, Walkerton, Ontario.

- 31947—Flint arrowhead. Gift of Jas. Warren, Walkerton, Ontario.
 31948—Flint arrowhead. Gift of Jas. Warren, Walkerton, Ontario.
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 31950—Flint arrowhead. Gift of Jas. Warren, Walkerton, Ontario.
 31951—Flint arrowhead. Gift of Jas. Warren, Walkerton, Ontario.
 31952—Flint arrowhead. Gift of Jas. Warren, Walkerton, Ontario.
 31953—Flint arrowhead. Gift of Jas. Warren, Walkerton, Ontario.
 31954—Eskimo skull, found between Herschel Island and the Mackenzie River. Gift of the Rev. C. E. Whittaker, of Fort Macpherson.
 31955—32065—Chert specimens, exchange from W. C. Barnard, Seneca, Mo.
 32066—Stone—Lot 12, Con. 4, West Nissouri Twp. W. G. Lee.
 32067—Arrow head, Lot 12, Con. 4, West Nissouri Twp. W. G. Lee.
 32068—Arrow head, Lot 12, Con. 4, West Nissouri Twp. W. G. Lee.
 32069—83—Flint arrowheads, from Lake Medad. Gift of E. D. Marshall, Hamilton, Ontario.
 32084—Soap stone pipe, Site 3, Lot 5, Con. 5, Bexley. Col. G. E. Laidlaw.
 32085—Arrow head, quartz, Lot 10, N.P.R., Eldon, 1912. Col. G. E. Laidlaw.
 32086—Copper Hook, Block E. Bexley, Site 20, Lake Shore. Col. G. E. Laidlaw.
 32087—Cache of Flints, Block E. Bexley, Site 20, Lake Shore. Col. G. E. Laidlaw.
 32088—Iron Adze. Gift of William Thompson.
 32089—Sword (Clayburn), near Presquille Point, Lake Ontario. Gift of H. Meade, Los Angeles.
 32090—Stone net sinker, Port Rowan, Lake Erie. Clayton McCall.
 32091—Stone net sinker, Port Rowan, Lake Erie. Clayton McCall.
 32092—Stone net sinker, Port Rowan, Lake Erie. Clayton McCall.
 32093—Pair shaps (leggings), Cree Indian, Filehill Reserve, Sask. Procured from Jim Tickle.
 32094—Pair shaps (leggings), Cree Indian, Filehill Reserve, Sask. Procured from Jim Tickle.
 32095—Pow wow sash (bone and bead), Cree Indian, Filehill Reserve, Sask. Procured from Jim Tickle.
 32096—Belt (beaded), Cree Indian, Filehill Reserve, Sask. Procured from Jim Tickle.
 32097—Pair moccasins, Cree Indian, Filehill Reserve, Sask. Procured from Jim Tickle.
 32098—Sash (beaded), Cree Indian, Filehill Reserve, Sask. Procured from Jim Tickle.
 32099—Tobacco bag, Cree Indian, Filehill Reserve, Sask. Procured from Jim Tickle.
 32100—Tobacco bag, Cree Indian, Filehill Reserve, Sask. Procured from Jim Tickle.
 32101—Bead necklace, Cree Indian, Filehill Reserve, Sask. Procured from Jim Tickle.
 32102—Shoulder strap, Cree Indian, Filehill Reserve, Sask. Procured from Jim Tickle.
 32103—Shoulder strap, Cree Indian, Filehill Reserve, Sask. Procured from Jim Tickle.
 32104—Arm band, Cree Indian, Filehill Reserve, Sask. Procured from Jim Tickle.
 32105—Arm band, Cree Indian, Filehill Reserve, Sask. Procured from Jim Tickle.
 32106—Pair women's leggings, Cree Indian, Filehill Reserve, Sask. Procured from Jim Tickle.
 32107—Pair child's leggings, Cree Indian, Filehill Reserve, Sask. Procured from Jim Tickle.
 32108—Beaded vest, Cree Indian, Filehill Reserve, Sask. Procured from Jim Tickle.
 32109—Beaded club, Cree Indian, Filehill Reserve, Sask. Procured from Jim Tickle.
 32110—Shell earrings, Cree Indian, Filehill Reserve, Sask. Procured from Jim Tickle.
 32111—Moccasins (beaded), Chas. B. Hale, Clinton.
 32112—Small brass kettle, Barber's Bay, Iroquois Falls. Donated by Fred. Dane.
 32113—Woman's coat (Algonquin), Hudson Bay. Procured from C. G. Gladman.
 32114—Hood (beaded). Procured from C. G. Gladman.



CAPUCHIN, or SAPAJOU MONKEY (*Cebus fatuellus*)
South America.

J.M., Jr.



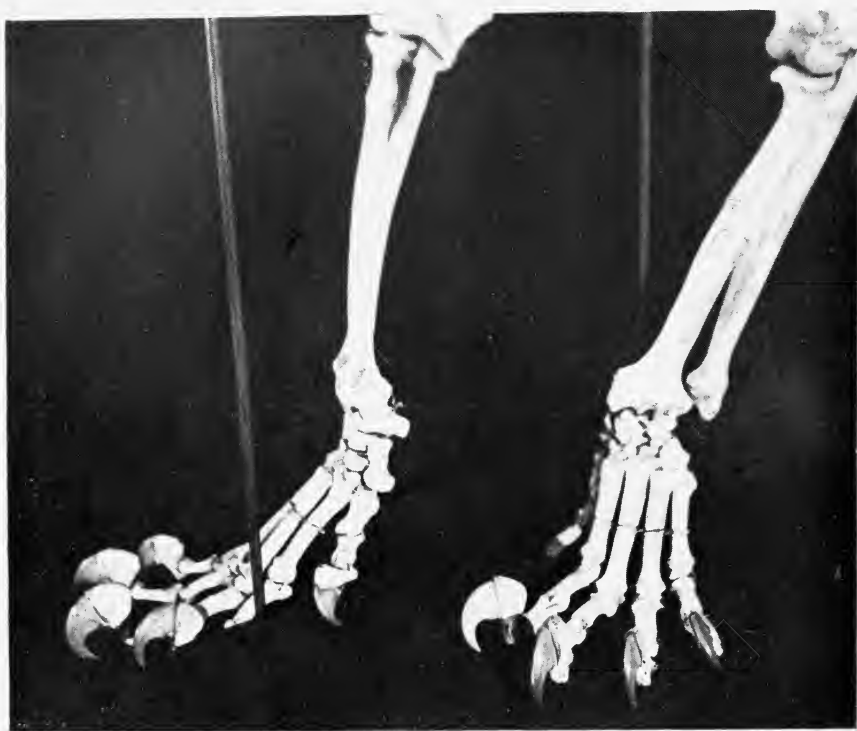
CAPUCHIN, OR SAPAJOU MONKEY
(*Cebus fatuellus*)
South America.

J.M., Jr.



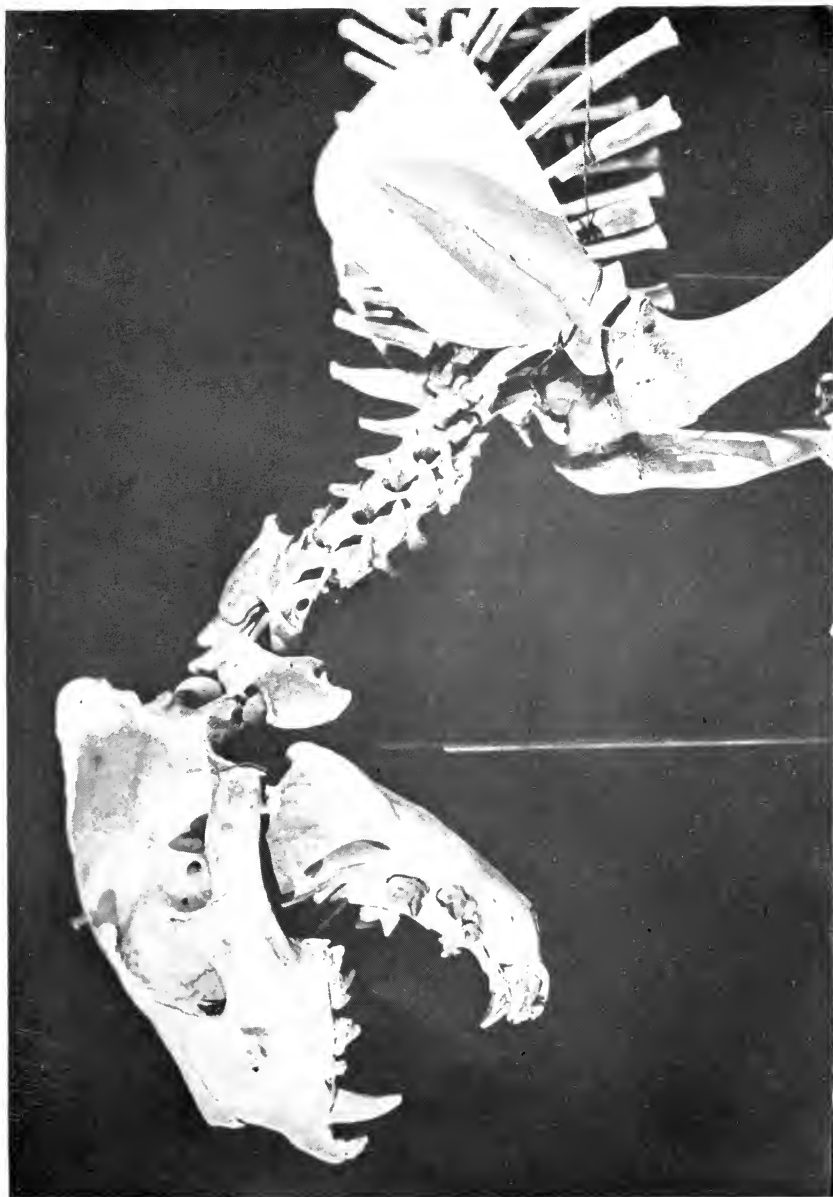
AFRICAN LIONESS (*Felis Leo*) (Four years old)

J.M., Jr.



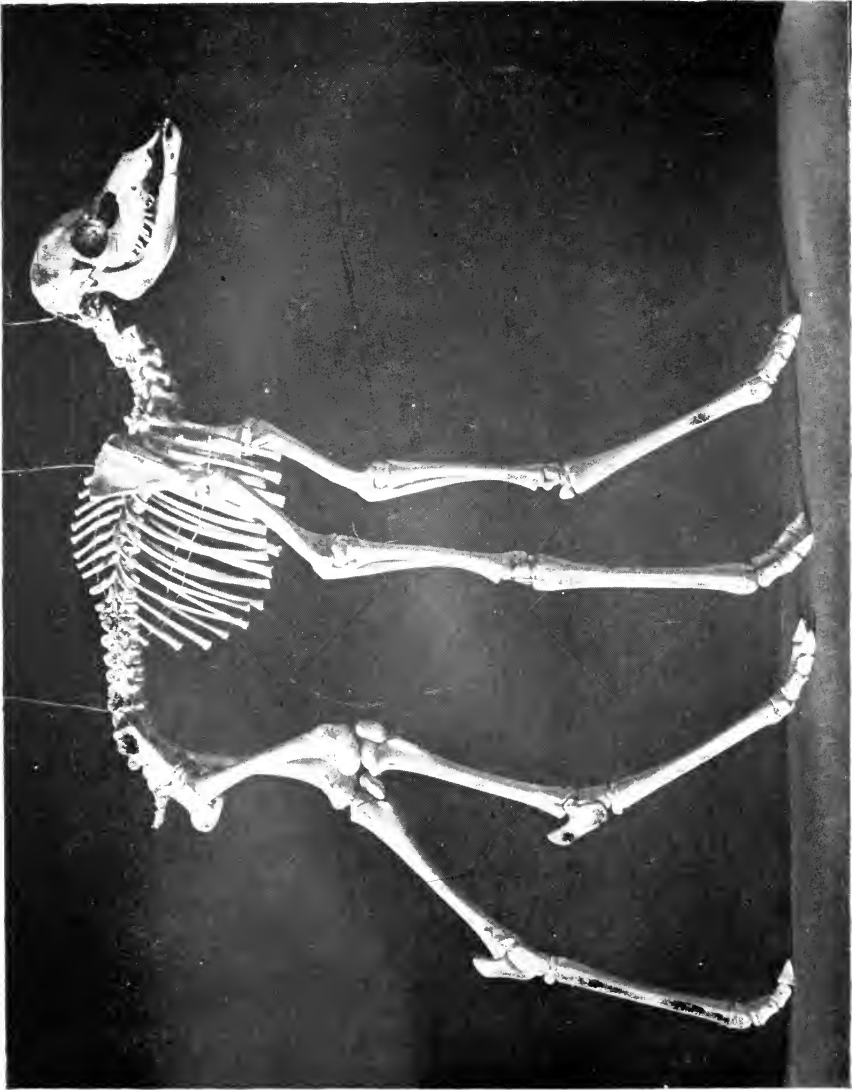
Carpal and Meta-Carpal bones of African Lioness.

J.M., Jr.



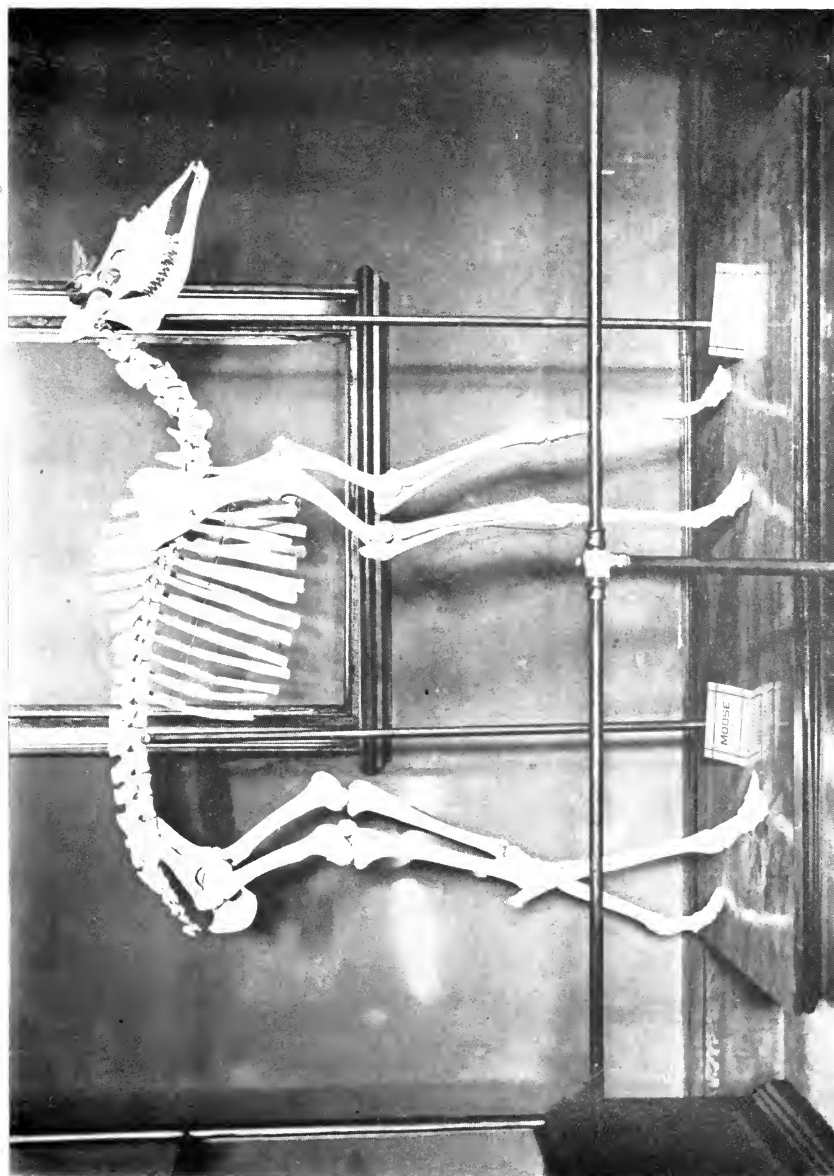
Skull and Neck-Vertebrae, and Scapular Articulation of African Lioness.

J.M., Jr.



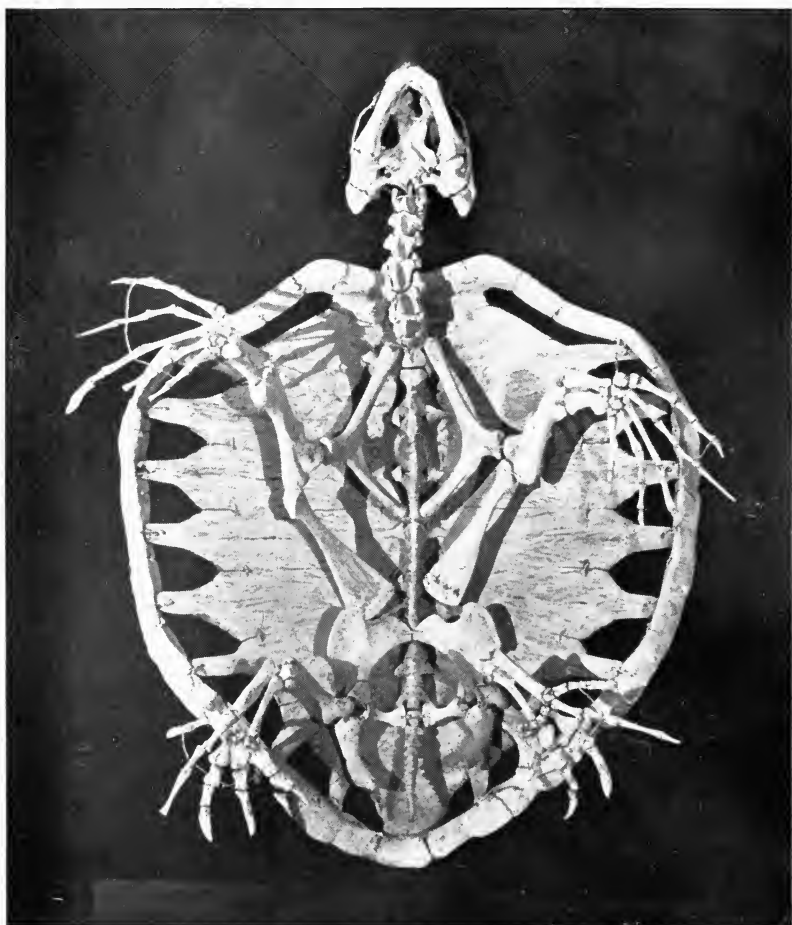
WAPITI (Young Male, one day old)
(*Cervus Canadensis*)
North America.

J.M., Jr.



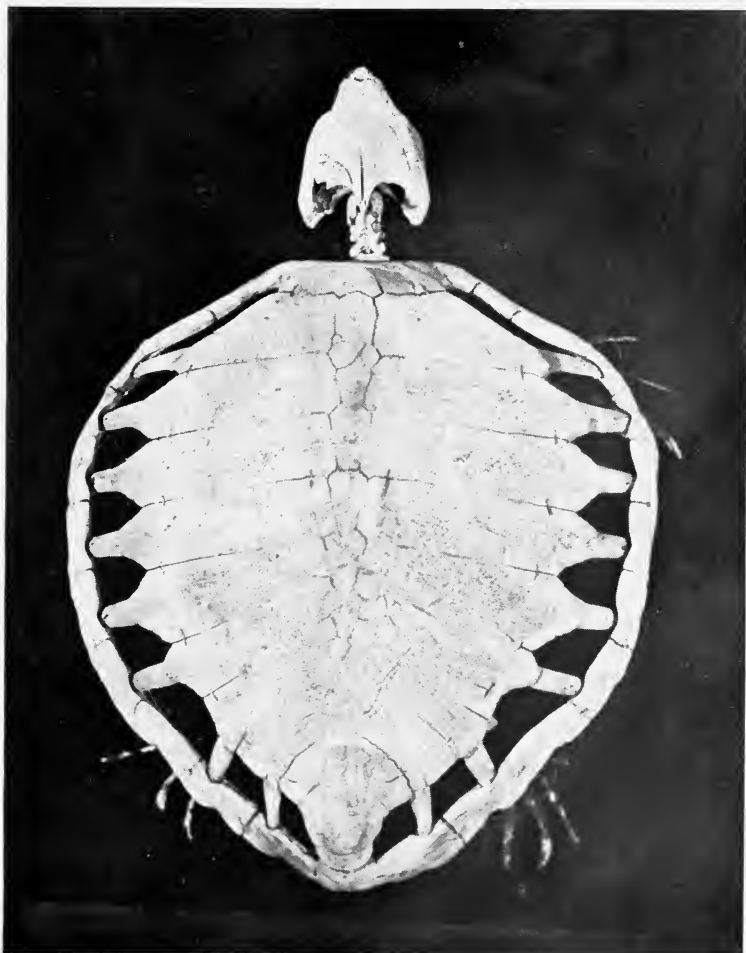
Moose (Young Male)
(*Alces Machilis*)
North America.

J.M., Jr.



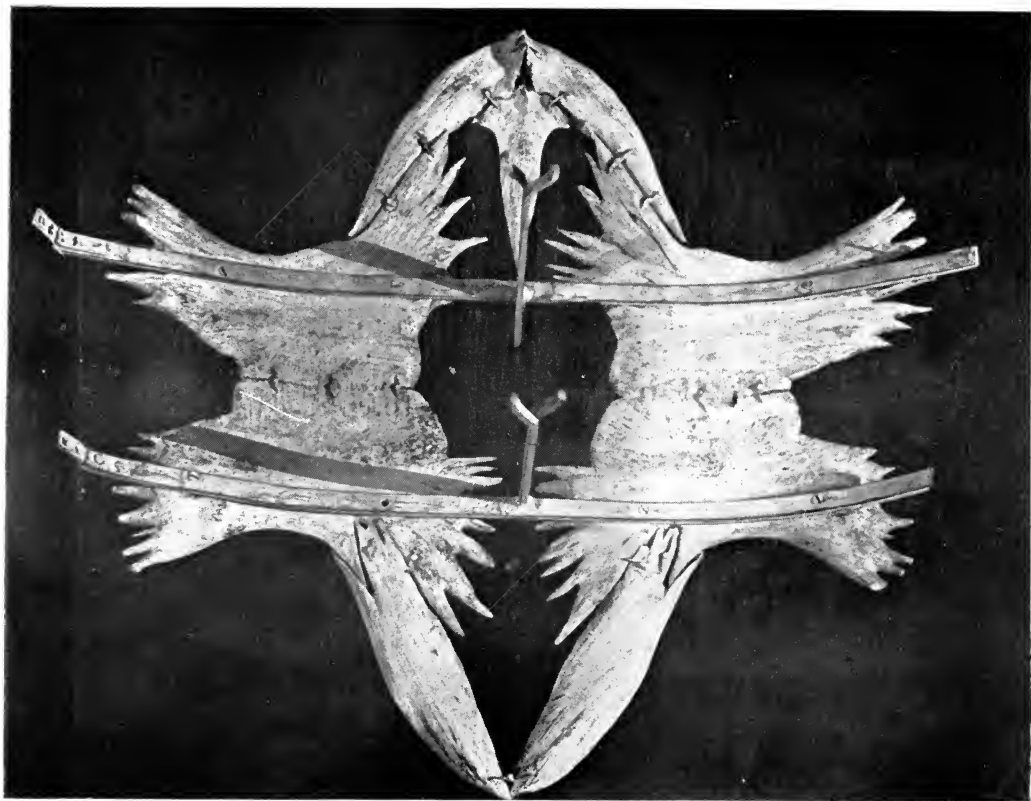
CARAPACE
Showing anatomy of fore and hind limbs.
(Green Turtle)
GREEN TURTLE (*Chelone Mydas*)
West Indies.

J.M., Jr.



UPPER VIEW OF CARAPACE
(Green Turtle)

J.M., Jr.



INTERIOR VIEW OF PLASTRON
(Green Turtle)

J.M., Jr



SPONBILL SANDPIPER (*Tringa Pygmaea*)

J.M., Jr

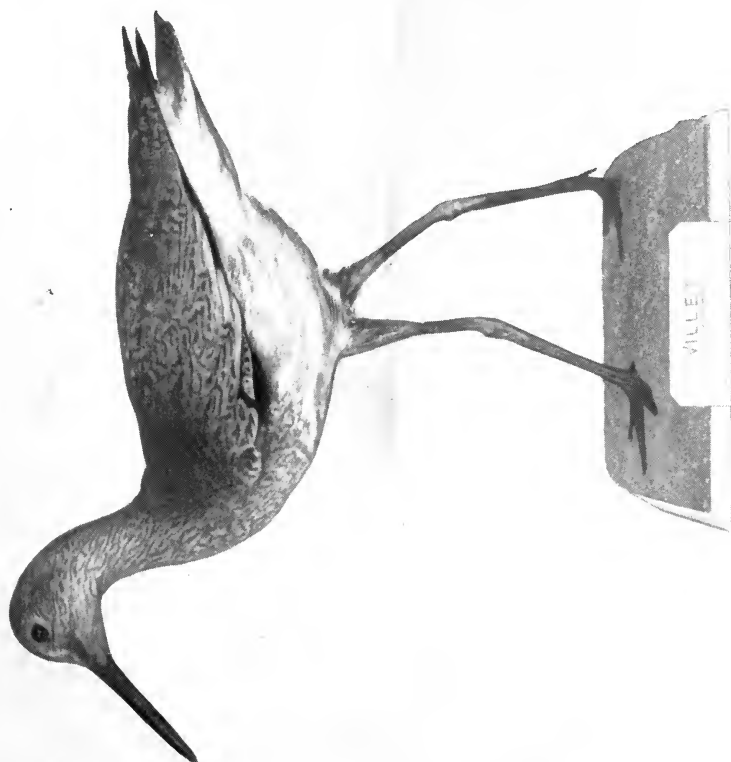
This specimen was collected at Hondo. One nest with four eggs was taken on July 15th, 1910, at Wrangie Island, west coast of Siberia, by Capt. Kleinschmidt. The young from the egg have the spoonbill developed. The male bird alone does the incubating.



MARbled GODWIT (*Limosa Fedoa*)

J.M., Jr.

North America, breeding in the interior (Missouri region and northward), migrating in winter southward to Central America and Cuba.



WILLET (*Symphemia semipalmata*)
(Female)

Temperate North America, south to the West Indies and Brazil.

J.M., Jr.



GANNET
(*Sula Bassana*)

J.M., Jr.

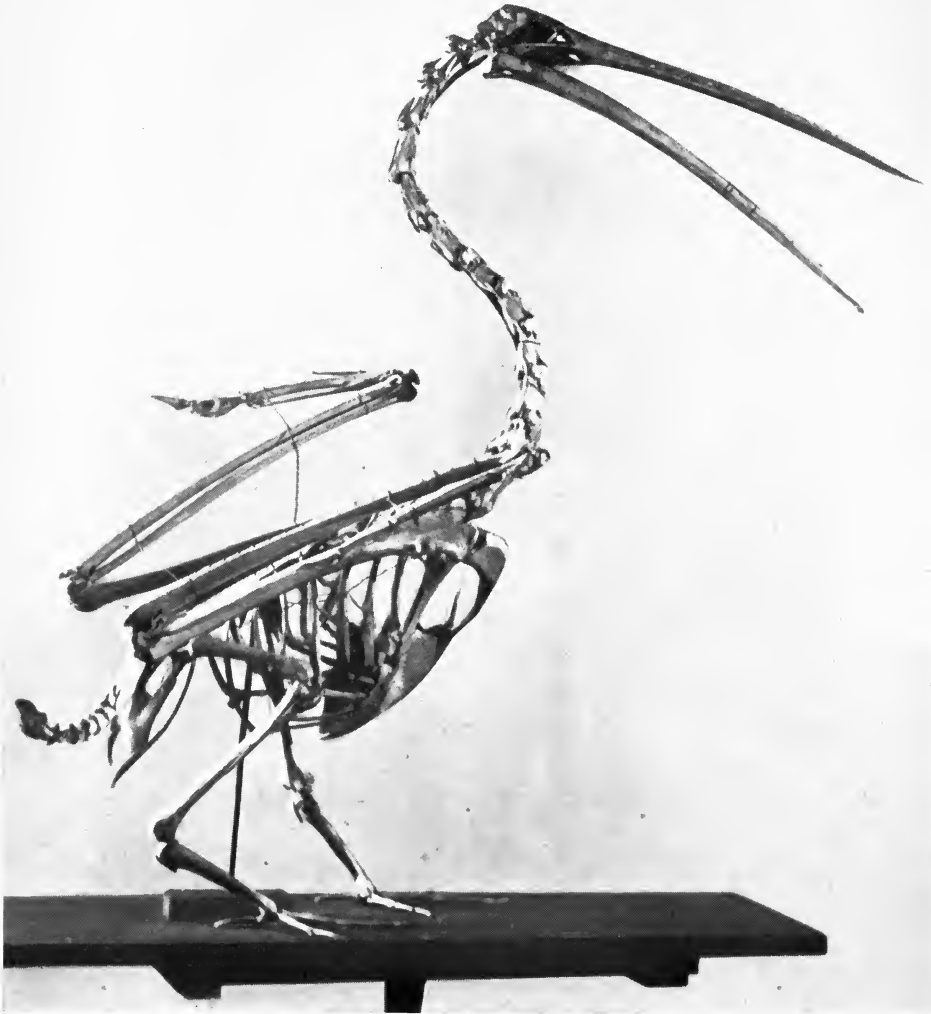
Coasts of the North Atlantic; south in winter, the Gulf of Mexico and Africa;
breeds from Maine and the British Islands northwards.



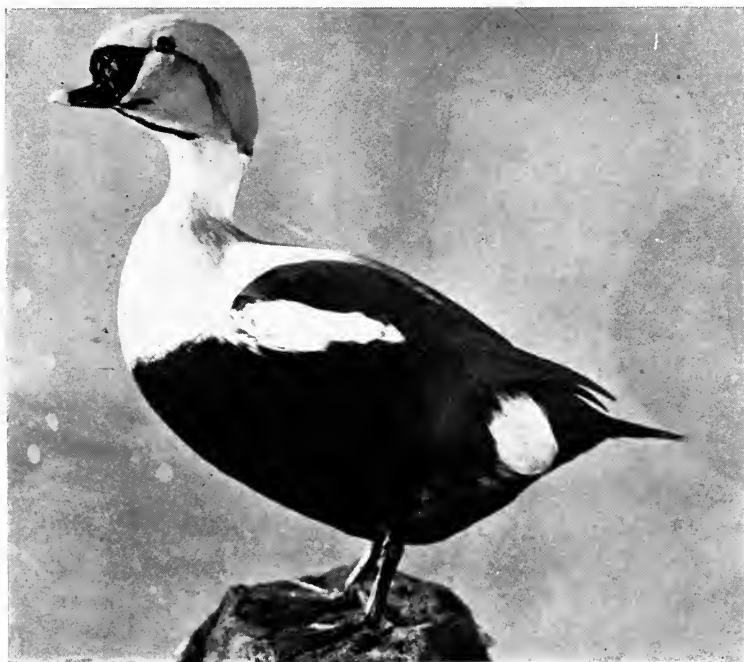
AMERICAN WHITE PELICAN
(*Pelecanus Erythrorhynchos*)

J.M., Jr.

An accidental visitor to the Great Lakes. They breed commonly in North Manitoba and the Western Provinces.



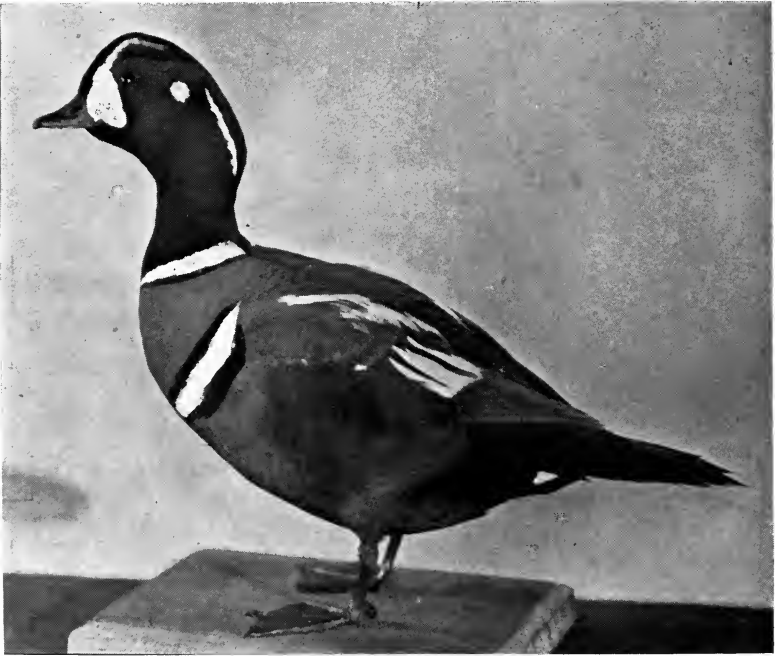
AMERICAN WHITE PELICAN (*Pelecanus erythrorhynchos*) J.M., Jr.
An accidental visitor to the Great Lakes. They breed commonly in North Manitoba
and the Western Provinces.



KING EIDER (Male)
(*Somateria Spectabilis*)

J.M., Jr.

Circumpolar distribution. Breeding on the shores of the Arctic Seas; in winter south on the west coast of the Aleutian Islands in great numbers; on the east, south irregularly as far as New York.



HARLEQUIN (Male)

J.M., Jr.

(Histrionicus Histrionicus)

Northern North America, breeding from Newfoundland, the Rocky Mountains, and the Sierra, Nevada, northward; south in winter to the middle States and California.



AMERICAN WOODCOCK (*Philohela Minor*)
(Female)

J. M., Jr.

Eastern Province of North America, south to Dakota, Kansas, etc., breeding throughout this range.



J.M., Jr.

AMERICAN WOODCOCK (Male)
(*Philohela Minor*)Eastern Province of North America, south to Dakota, Kansas, etc., breeding
throughout this range.



MOURNING DOVE
(*Zenaidura Macroura*.)

J.M., Jr.

A common summer resident of North America from Southern Maine, Southern Canada and Oregon, south to Panama and the West Indies.



PASSENGER PIGEON
(*Ectopistes Migratorius*)
(Male)

MOORING DOVE
(*Zenaidura Macroura*)
(Male)

J.M., Jr.



PASSENGER PIGEON
(*Ectopistes Migratorius*)

J.M., Jr

Formerly a very abundant summer resident, then occurring in flocks of countless thousands, but now practically extinct.



(Adult male)

(Young male)

CORY'S LEAST BITTERN
(*Botaurus Neoxenus*)

J.M., Jr.

This pair of birds was taken at Toronto, Ashbridge's Bay, 1900. These
are now the property of the Provincial Government.



ESQUIMAUX WOMAN

Ottawa Provincial Museum Toronto
1913

ANNUAL
Archæological Report
1913

BEING PART OF

Appendix to the
Report of the Minister of Education,
Ontario.

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO.



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1913.

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TORONTO

PRESENTATION

To the HONOURABLE R. A. PYNE, M.D., LL.D., M.P.P.,
Minister of Education, Toronto.

SIR,—In presenting you with my Third Annual Report, and the Twenty-fifth issued from the Ontario Provincial Museum, permit me to draw your attention to the fact that the additions to the Archæological Department during the year number over twenty-three hundred and sixty. The additions to the Biological,

Ethnological and Historical Departments have been very numerous. In fact, the contributions and gifts to the Provincial Museum during the year 1913 exceed in value the entire amount expended for maintenance by your Department. Valuable donations have been received during the year from Clayton McCall, Geo. A. Smith of New Hamburg, L. D. Brown of St. Mary's. Numerous other smaller collections have been contributed and credited at the end of the Report. I would strongly recommend that the appropriation for field-work be very much increased for the ensuing year.

I have the honour to be,

Sir,

Your obedient servant,

ROWLAND B. ORR,
Director.

TORONTO, Dec. 30th, 1913.

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" PREHISTORIC AMERICA "

We cannot tell here the story of all these races of American Indians, however interesting it may be. We shall confine ourselves to giving a résumé of a few of them. We shall give an account of the habits of these, their habitations, industry, manners and style of life so far at least as is possible to know them; and finally we shall try to find out what may be known of their origin and their migrations. Above all, we shall confess our ignorance when proofs are not to be had, or when assumptions are destitute of the clearness and precision indispensable to their acceptance. "To know," writes Bacon, "when to be ignorant, is a great science," and this ought to be the eternal maxim of men engaged in scientific studies.

There is one last remark which I cannot omit. By one of those laws which cannot be overlooked, men absolutely alike in their osseous structure, absolutely alike in the degrees of progress realized by them, were scattered in the jungles of India and the cold forests of Canada, hunted the bear and the buffalo with the same stone weapons on the banks of the Mississippi and Delaware as of old on those of the Seine and the Thames. Civilization everywhere follows the same phases; the same wants everywhere produce the same conceptions. This is the great and useful lesson resulting from anthropological and prehistoric studies, and to borrow the words of the eminent scholar, Horatio Hale, "the study of the physiological and psychical features of the languages, mythologies and social systems of the different surviving races, from Alaska to California, leads to this conclusion—that the physical differences existing in the varieties of men can be adequately explained by climatic and other local influences; and that all ground for affirming the existence of several human species evolved from different sources must disappear."

L'Amerique Prehistorique,
Marquis de Nadaillac,
Member of the French Academy.





ONTARIO PROVINCIAL MUSEUM
St. James Square, Gould Street, Toronto.



THE ATTIWANDARONS

OR

NATION OF THE NEUTRALS

Before entering upon a brief history of the Attiwandarons or Neutrals of the Niagara Peninsula it may be of some service to introduce a preliminary notice of the Europeans who first visited this numerous and powerful nation, and to whom we are indebted for any information we now possess bearing upon the habits, customs, manners and regional habitat of this annihilated tribe.

ETIENNE OR STEPHEN BRULÉ (BRUSLÉ).

Etienne Brulé was the first white man who ever entered an Attiwandaron wigwam. His parentage and birth are not recorded. We first hear of him, when in 1610, he accompanied Champlain to the Algonquin encampment at the mouth of the Richelieu, then called Rivière des Iroquois. He was one of the eight who recovered from the disastrous scurvy that carried off ten of Champlain's men during the terrible winter of 1608-9.

When the Algonquins had ended their interview with Champlain they returned to their hunting grounds on the Ottawa. With them went the boy Brulé committed by Champlain to the care and protection of Iroquet, chief of the Algonquin band, known to the French as "The Little Tribe of the Algonquins" (La Petite Nation). Brulé was the first of the number of the adventurous, intelligent and hardy youth whom Champlain put in the care of his Indian allies to train them to the life of the woods—to the language, manners, customs and habits of the savages. His object was to familiarize these young men with savage thought and ways so that through them he could bring into alliance with the French all the tribes of the upper regions of New France. Prominent among these youths was Jean Nicolet, the explorer and interpreter.

When, in 1615, Champlain, at the Couchiching council of the Huron and Algonquin braves, resolved to send a deputation to the Andastes or Carantouannias, a Huron offshoot, who dwelt on the upper waters of the Susquehanna River of the present State of Pennsylvania, Brulé accompanied the embassy. It was a perilous undertaking, for the Iroquois of Western New York were the enemy of the French and at war with the Hurons. To escape the Seneca territory through

which lay the direct route to the headwaters of the Susquehanna, the deputies were forced to go many miles out of their way. They crossed Lake Simcoe, portaged to the Humber and sailing down, canoed around Lake Ontario and landing on the east bank of the Niagara River were on the territory of the friendly Attiwandarons. Brulé was the first white man to see and canoe the waters of Lake Ontario. Arriving with five hundred Andaste warriors, too late to assist Champlain and his allies laying siege to the Onondaga capital (Oct., 1615), Brulé returned with the Andastes and wintered with them. He now entered upon an expedition of exploration through central Pennsylvania, the Susquehanna regions and the lands about Chesapeake Bay. Retracing his steps to Carantouan he tarried here for awhile and then entered upon his return journey to Huronia. Passing through Iroquois territory, he was taken prisoner by the Senecas and after an extraordinary series of adventure was liberated and escorted by Seneca guides to the Neutral boundary. Crossing the Niagara River, he passed through the Neutral villages in peace and arrived safely in the Huron country. It was Brulé who some time afterwards met, at Three Rivers, the Franciscan or Recollet priest, Joseph Le Caron, and told him of the splendid climate, the rich lands and the number and influence of the Neutral nation—the Attiwandarons.

The glowing report of Brulé no doubt induced Le Caron, then Superior of the Recollets in New France, to send Father Joseph Daillon on a mission to the Neutrals.

The Récollet, Gabriel Sagard in his "*Histoire du Canada et voyages*," (Paris, 1636, p. 198), tells us that Brulé, in 1621, was at the Huron town of Toanche. That with a French trader named Grenolle he went on an expedition of exploration to the north and discovered copper outcroppings. He then pushed to the west, and returning with a large ingot of copper, claimed to have visited the Paoutagouns or Sauteurs of Sault Ste. Marie, now the "Soo." All this may be true, but G. W. Butterfield in his "*History of the Discovery of the Northwest*," (Cincinnati, 1881, p. 5) claims this honor for the explorer, Nicolet. He writes: "Entering, finally, St. Mary's strait, his (Nicolet's) canoes were urged onward for a number of miles until the falls—Sault de Sainte Marie—were reached: and there stood Nicolet, the first white man to set foot (1634) upon any portion of what was, more than a century and a half after, called 'the territory north-west of the river Ohio.'"

In 1632, Brulé was again with the Hurons of the Georgian Bay. In this year he was tortured, roasted and devoured by the Huron savages for reasons not necessary to be mentioned here. He is referred to for the last time in the "*Relation*" of 1636, where the Algonquins of Borgne de l'Île charge the Bear Clan of the Hurons with the murder of Etienne Brulé and "*un pauvre misérable française massacré aux Hurons.*"

JOSEPH DE LA ROCHE DE DAILLON.

The Récollet (Franciscan) priest de La Roche de Daillon of an aristocratic family of the Department, now known as the La Sarthe, France, came to Canada in 1625, and in company with the Jesuit priests Jean de Brébeuf and Anne de Noue, arrived in the Huron Country July 25, the same year. On October 18, 1626, he left Toanché or Penetanguishene Bay on his mission to the Attiwandarons. He was accompanied, according to Sagard (III. Hist. p. 800) by one or two

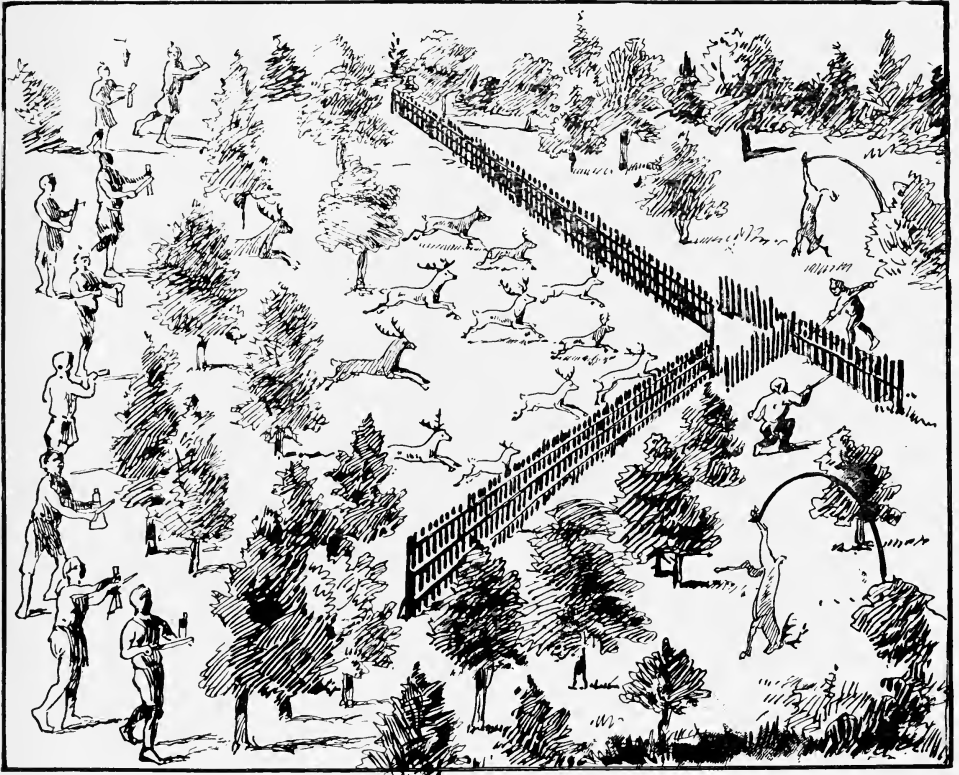
Huron guides and two French traders, La Vallée and Grenolle. This was the Grenolle who afterwards sailed with Brulé on his north-western expedition. From his letter to a relative in Paris, France, (Le Clercq "*Le Premier Etablissement de la Foy dans Nouvelle-France*" p. 347 et seq.) we learn that leaving the Huron Frontier he entered the lands of the Tobacco nation or Petuns, known to the early English and American settlers as Tionnontates or Dinnindadies. His path now carried him southward through the counties of Grey and Wellington till he struck the Grand River, and following its course entered the hunting lands of the Attiwandarons. Now, let us take a few extracts from his letter: "Passing through the Tobacco nation" he informs us that he "made the acquaintance of and formed a friendship with a Petun Chief, a man of importance, who promised to guide me to the Neutral country. He fulfilled his promise; we slept in the woods only five nights, and on the sixth day, (October 24, 1626,) arrived at the first village where we were well received.* We then visited four other towns in every one of which the people vied with each other in bringing us food—some venison, others squashes, neinthaony, (Indian corn roasted) and the best they had." Daillon then called a council of the head men, and after distributing gifts to them, requested that he might be permitted to remain and "instruct them in the law of God and the means by which they might go to heaven." He rejoiced their hearts with more presents, and in the exuberance of their appreciation of his generosity, they made him a citizen of their nation and placed him under the protection of their valiant chief, Thoshahissen. So far everything was pleasant for the good priest. Soon the skies darkened and clouds portending a storm began to rise above the horizon of his expectations. Some one reported to the Hurons that the priest was about to divert the commerce of the Attiwandarons from themselves to the French at the "Place of Trade." This Place of Trade was at Lake St. Peter's, on the St. Lawrence River, fifty miles below Montreal. It was called Cape Victory, for it was here that Champlain and the braves of the Petite nation defeated the Iroquois warriors. This was where Fort Richelieu was afterwards built. Directly opposite the mouth of the Richelieu, facing the fort, was the "Place of Trade," described by Sagard, alluded to by Father Daillon and possibly by the heroic Brébeuf, 1640.

The Iroquois closed the St. Lawrence to the Hurons, with whom they were at war, forcing them to a circuitous Ottawa route to reach the Place of Trade and exchange their furs and peltries with the French. The Neutrals had, until the visit of the priest, sold their furs and trinkets to the Hurons, who, at great profit, rebartered them to the French. The Neutrals did not know how to get to the Place of Trade, perhaps had never heard of it.

Now if, under the direction and advice of the priest, the trade of the Neutrals was diverted from the Hurons to the French, the Huron nation would be hard hit. The wise men of Huronia met in Council and, two weeks after the meeting, Huron messengers, ambassadors from the kinsmen of the Neutrals, arrived in their villages and it was all over with the mission of the brave and pious missionary. The Huron runners went from village to village denouncing the French, saying "they were sad,

* Mr. J. B. Hewitt, of the Bureau of American Ethnology, says, in his article on the Neutrals, that "this first village was Kandoucho or All Saints." Mr. Hewitt, who is uniformly accurate, has, we are satisfied, mistaken the Kandoucho of Brébeuf and Chaumonot's time, named by them—1640—All Saints. This "first village" is not mentioned by name in Daillon's letter or by Le Clercq or Sagard.

melancholy people, who live only on snakes and poison; that we eat thunder, which they imagine to be an unparalleled chimera, relating a thousand strange stories about it; that we all had tails like animals; that the women had only one nipple in the centre of the breast; that they bare five or six children at a time; adding a thousand other absurdities to make us hated by them, and prevent them trading with us, so that they might have the trade with the French to themselves exclusively, which is very profitable to them." They also asserted that the priest was a great sorcerer, that when among the Hurons he introduced the plague which destroyed hundreds. By his sorcery, they contended, he would poison their streams, drive away the game and destroy their crops. The Neutrals



Aboriginal Deer Hunting, Champlain.

were overcome with fear. A sorcerer was, of living men, the most malignant, most powerful for evil and the most dreaded. Sorcerers were remorselessly slain. If the accusation had been brought home to one of their own he would have perished that night. They dared not slay the priest for they dreaded the vengeance of the French. But from the hour the charge was brought against him he became a victim of abuse, insult, scorn and contumely. His mission was a failure, his hopes dead, his expectations buried.

He returned to the Huron country and there, on July 18, 1627, in the Indian town of Toanche, wrote his valuable letter. In this letter he records his own experience with the tribe, tells of what he saw and heard, expresses hopes for their conversion and declares himself to be "The most humble servant

of our Lord,—Joseph de La Roche d'Aillon." Father Daillon left the Huron country in the autumn of 1628, and never returned. He sailed for France, September 9, 1629. In the "Liste Chronologique" of the Abbé Noiseaux, the date of his death is recorded, July, 16, 1656.

BRÉBEUF AND CHAUMONOT.

On November 2, "Feast of All Souls," 1640, two missionaries of the "Society of Jesus" (Jesuits)—John de Brébeuf and Joseph Chaumonot, left Huronia to preach the gospel of salvation to the great nation of the Attiwandarons. The history of the life and martyrdom of the heroic priest, John de Brébeuf, is so familiar to every student of Canadian aboriginal and missionary life as to make it almost idle for us to dwell upon it here. If, according to Parkman, La Salle was "one of the grandest men that ever trod the American continent" we may claim, without a suspicion of exaggeration, that John de Brébeuf is one of the most saintly and heroic figures in Canadian History. An admirable sketch of his life and a thrilling and brilliant description of his martyrdom are to be found in Dean Harris' "Pioneers of the Cross in Canada." Of Joseph Chaumonot, Brébeuf's priestly companion on the Neutral mission, very little is known even to the critical reader. We propose to enter upon a few details of his life and complete the brief biographies of the only white men who lived with the Attiwandarons and furnished us with all, and with the only historical and accurate information bearing on the habits and customs of this ruthlessly slaughtered tribe of Indians.

Joseph Marie Chaumonot was born in France, March 9, 1611. He made his studies in Philosophy and Theology in the universities of Rome and Florence, Italy, and after his ordination to the priesthood in 1639, sailed in a few months for Canada, landing at Quebec, August 1, 1639. Early in the autumn of the same year he entered the Huron country and under the direction of the missionary fathers, Ragueneau and Daniel, he began the study of the Huron language. His mission compelled him to visit every morning the huts of the savages. This he found the most trying ordeal of his vocation, for his stomach revolted against the filth and foul odors of the cabins. "So great was my repugnance to these visits," he writes in his "Autobiographie," "that every time I prepared to visit one of these huts I felt I was about to undergo the ordeal of torture." Though not dowered with great ability he possessed extraordinary gifts of memory and in an incredibly brief time mastered the Huron tongue, "the most difficult of all the savage languages," writes Sagard. It was because of his intimate familiarity with the Huron language that he was selected to be the companion of Father Brébeuf on the mission to the Attiwandarons whose speech was that of the Hurons though differing in dialect. Joseph Chaumonot was a man whose nature was "childlike even to credulity, timid even unto fear; an intellect incapable of high development, a character in which there was nothing striking, yet a man who, under the divine influence of grace and by the austere practice of the highest virtues, became one of the most beautiful figures in the early missionary life of Canada." (Rochemonteix, vol. III, p. 399.) In the first week of November, 1640, the two missionaries, Brébeuf and Chaumonot, bade farewell to their priestly companions at Sainte Marie of the Hurons and after a trying experience extending over a period of five days arrived at the frontier Neutral village of Kandoucho which they named "All Saints." Almost at once the devoted men



JOHN DE BRÉBEUF, S.J.
Missionary to the Attiwandarons.

encountered a storm of opposition. The details covering their experiences and observations are recorded in the Relation of 1641, where we read that the Neutral nation occupied "about forty towns inhabited by twelve thousand souls.*

Hardly had the missionaries crossed into Attiwandaron territory when they encountered a serious opposition and an open hostility unforeseen and unexpected. Huron messengers, carrying to the Neutral chiefs valuable gifts and some French axes, had entered the territory before the missionaries, and warned the warriors to be on their guard against the "black-gowns" if they wished to save their lives. "It is hard to credit," writes Lalemant, "the tremendous effect produced upon these poor savages by the stories of the Hurons. The report circulated among them of our great power for evil wrought upon their naturally defiant and courageous spirits a fearful and withering effect. The very appearance of the Fathers, their movements and dress—so different from their own—their manner of walking, their gestures, and, in fact, their every action, seemed to be a confirmation of the ominous tidings borne to their ears. The breviaries, ink-horns and materials for writing were regarded as instruments of magic, and their very posture, when on their knees praying to God, was associated with the practice of sorcery. When they went to the stream to wash their plates, they were said to be poisoning the waters. It was reported of them that when ever they visited a lodge, the children began to bleed and were seized with a fit of coughing, and the women struck with barrenness. In fact, there was no misfortune so great for the present and the future of which they were not considered to be the cause. At some of the cabins where the Fathers lodged the inmates slept neither night nor day, refused their presents as things malign, and skulked in the farthest ends of the tents. The good wives already looked upon themselves as lost, and mourned for their little ones, who would not live to people the earth."

The Neutrals believed the Huron runners, and after five months of heroic endeavour the men of God returned to Huronia bearing with them the fruit of self-sacrifice, patience and unconquerable courage and the disappointed hopes they had reaped from a harvest of barren regrets.

THE ATTIWANDARONS.

The eminent and observant Jesuit, Francis Joseph Bressani, in his history "Breve Relatione," written in 1653, after describing the boundaries of the hunting grounds of the Hurons, writes: "To the south, on the shores of this great lake (Huron), dwelt the people whom we call the 'Nation of the Petuns,' so named from the great quantity of tobacco which they raise and to which they give the name of petun. To the south, but leaning towards the east, dwelt the Neutral Nations. Their nearest villages to us, who live at Ossossane of the Hurons, are distant about one hundred miles. Their territory is about one hundred and fifty miles in length." (Martin edition, p. 11.) These hundred and fifty miles would include all the land extending from thirty miles east of the Niagara River to the St. Clair flats. It was a rich and productive region covered with a magnificent forest growth and filled with forest life. How long

* Dailon wrote that when he visited them there were twenty-eight towns, villages and bourgs. The disparity disappears when we understand that clusters of huts were sometimes called villages, and that as Sagard tells us in "Le Grand Voyage du Pays des Hurons," "Il y a des certaines contrées où ils changent leur villes et villages, de dix, quinze ou trente ans.—There are some countries where they change the sites of their towns and villages every ten, fifteen or thirty years."

the Neutrals possessed this splendid heritage no one knows. Horatio Hale in his "Book of Iroquois Rites" is of the opinion that "centuries before the discovery of Canada, the ancestors of the Huron-Iroquois family (including the Neutrals) dwelt near the mouth of the St. Lawrence." This assumption of the author may be correct, and accepting it to be so in lieu of a better, a natural increase of the family followed and dissensions occurred. As the hives swarmed, band after band moved westward, following the southern shore of Lake Ontario, the main body of the migrants calling themselves "Wendots," known early in



Petun woman ridging tobacco plants.

the seventeenth century to the French as Hurons, camped on the Niagara Peninsula. Remaining here for a period they eventually rounded the western waters of Lake Ontario and in course of time took possession of the Georgian Bay forests. After many years they were joined by their kinsmen the Tionnontates or Petuns who followed the course of the Ottawa.

All this, however, is only tradition, and in it there is nothing to account for the migrations and settlement on the north shore of Lake Erie of the Attiwandarons of the Huron-Iroquois trunk. Dean Harris thinks that the Neutrals were among the first to leave the main body. In his lecture on the

"Flint Workers" he says: "Regarding their migration there is not even a tradition, but their settlement beyond the most westerly of the Iroquois clans and the fact that they held aloof from the Huron-Iroquois feuds point to an earlier and wholly independent flitting. It is also admitted that their language differed but slightly from that of the Hurons which was undoubtedly the parent tongue, so the inference is that their separation from the Wyandot side of the mountain down by the sea must have occurred long before the great disruption drove the older clans to seek a home on the shores of the Georgian Bay."

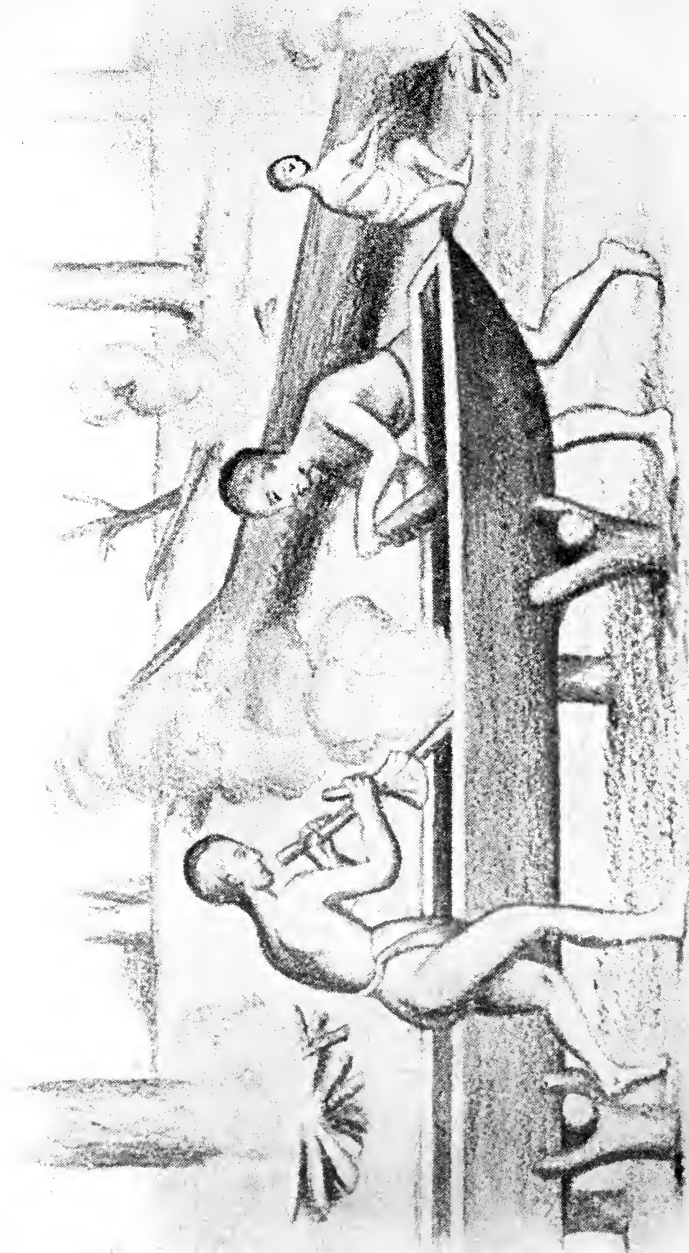
The first authentic reference to this sedentary tribe is made by Champlain in his "Journal" (ed., 1619). He tells us that at the time of his visit to the Hurons the Neutrals were in friendly alliance with the Ottawas and the Andastes, but were then at war with the Nation of Fire whose tribal lands stretched eastward as far as the Detroit Narrows. Champlain did not enter the territory of the Neutrals, hence his estimate of their numbers and fighting strength was simply hearsay.

The Franciscan priest, de la Roche Daillon, who tramped the Neutral territory (1626) tells us that in his time the Neutrals numbered 12,000 souls, and were able to throw 4,000 warriors against the enemy. In his letter he speaks of the climate with appreciation, notes the incredible number of deer, moose, panthers, bears, wild-cats and squirrels in the woods. "The rivers furnish excellent fish, and the earth yields abundant crops. They have squashes, tobacco, corn, beans and other vegetables. Their real business is hunting and war. Their life, like that of the Hurons, is very impure and their manners and customs just the same." He adds that there were twenty-eight villages in the country.

As the Attiwandarons sprung from the Huron-Iroquois trunk their government, criminal code, marriage ceremonies and superstitions were the same as those of the Hurons. Their dances and feasts, treatment of prisoners taken in battle, the cultivation of the soil, the division of labor between men and women, their passion for gambling and manner of trapping and hunting were all similar to those of the Iroquois and Hurons with which we are familiar.

Daillon and Brébeuf drew particular attention to their funeral customs and treatment of their dead. The dead body was tenderly kept in the lodge till the odor of decaying flesh became insupportable. The corpse was then carried to an elevated scaffold and after the flesh had been devoured by carrion birds or rotted away, the bones were collected together, cleaned and polished and suspended from the covering of the lodge till the communal "Feast of the Dead" or tribal burial. "Their reasons," writes Father Chaumonot, "for preserving the bones in their cabins is to continually keep before them the memory of their dead; at least so they state."

The Neutrals carried to an insane excess the belief that madness and insanity were produced by some mysterious agency, superhuman power or a foreign spirit entering the brain of the insane man. They dreaded the evil influence of the possessed person and thought that any interference with the freedom or license of a fool would be visited by the wrath of the evil spirit or Oki in the madman. Pretended maniacs haunted every village. They abandoned themselves to idiotic folly so that by the people they would be thought to have received a mystic power from an Oki. "On one occasion," writes Chaumonot, "three pretended maniacs, as naked as one's hand, entered the lodge where we were, and after performing many foolish antics, disappeared. On another occasion some of them



Hurons making dugout canoe, from De Bry, showing the use of fire and stone implements.

entirely naked, not even wearing a breech-clout, rushed in and began to examine our bags."*

It is of interest to inquire how the Neutrals were able to remain aloof from the interminable feuds which from remote times were waged on either side of them by the Hurons and the Iroquois. There is no other example in aboriginal history of a tribe occupying middle or neutral land that was not sooner or later compelled to side with one or the other of the tribes lying on its opposite frontiers, if these tribes were engaged in never-ending strife. The secret of their neutrality and immunity from attack will probably be found in the fact that the Neutrals controlled the flint beds and quarries of the Lake Erie shore, near Point Abino, where the chert-bearing rock is most abundant. Without flint arrow-tips and flint lance-points, the Iroquois could not cope with the Hurons, nor the Hurons with the Iroquois. The Iroquois were too shrewd and the Huron too prudent to make an enemy of a people who manufactured the weapons of war and controlled the supply. To all who are interested in the life of primitive man in our Province, the superiority of the workmanship manifested in the flint objects found in the bone-pits and old kitchen-middens of the Niagara Peninsula and in the lands around Chatham and Amherstburg must satisfy them that the Neutral excelled the men of other tribes in splitting, polishing and fitting flakes of the chert-carrying rocks.

Independent of its concrete value as ethnological evidence in the study of the North American Indian's upward movement toward civilization the Neutral flint is partial proof that what is cultivated or manufactured with superior skill by one tribe is eagerly sought after by others. We have instances of this in the Tobacco Nation and the Neutrals. Primitive methods of manipulating raw material and of manufacturing and handling tools and instruments must ever prove attractive to the student of ethnology, for in these methods we observe the dawn of ideas actualised in the daily lives of savages.

Father Chaumonot, in the Relation of 1641, tells us that the Attiwandarons were physically the finest body of men he had anywhere seen, but that in cruelty to their prisoners and in general lewdness they surpassed those of any tribe known or visited by him. We are of the opinion, formed from hints thrown out by early writers, that there was a communal understanding among the Indians living east of the Rocky Mountains, that of the prisoners captured in war and tortured to death, women were spared the agony of death by burning. At times this merciful exception was violated by the Iroquois and the Illinois, but the Neutrals were the only tribe that habitually broke the pact, for they subjected many of their female prisoners to the atrocious torture of fire.

Long immunity from incursions by the Hurons and the Iroquois, the fertility of the soil, the wealth of stream and forest life, the superabundance of vegetable and animal food tempted the Neutrals to devote their leisure to the enjoyment of every savage luxury and to the indulgence of every animal appetite. They boasted in their village councils that the Hurons and the Iroquois feared them and dared not to meet them in battle. The truth was they quailed before the face of the Five Nations and stood in awe of the Hurons who refused them right of way to the Ottawa. But as a bloody pastime they waged cowardly and ferocious war against the weak western Algonquin clans. In Ragueneau's Rela-

*Discurrunt velut a Daemone possessi, et irrumpunt in mapalia, (Res Gestae. MSS., p. 39).

tion of 1644, we read that in the summer of 1643, the Neutrals threw 2,000 of their fighting men into the lands of the Mascoutins or Nation of Fire. That they invested one of the forty-five towns of the enemy, and, after a ten days' siege, stormed and captured it, slaughtering men, women and children. They burned seventy of the Mascoutins at the stake, tore out the eyes and girdled the mouths of the men and women past sixty years of age, and scorning their appeal to be put to death, abandoned them to the horrors of a death by starvation and exhaustion. They raided the country and dragged back with them to their own forests eight hundred prisoners, men, women and children, many of whom were distributed among the Neutral villages, in which they were condemned to atrocious mutilations and frightful tortures prolonged from sunset to sunrise.

There is a mysterious law of retribution, which in the accuracy of its application is reduced to a mathematical certainty. When the Mohawks and the Senecas, the War-hawks of the wilderness, had driven to flight or destroyed their enemies, the Hurons, they turned wistful eyes on the land of the Attiwandarons. The Attiwandarons, who had filled to overflowing the measure of their atrocities, had, by their ruthless barbarity and savage cruelties, invoked their doom.

The Iroquois now looked around for a pretext to open war on the Neutrals. Father Lafitau states in his "*Moeurs des Sauvages*" that when the Iroquois had conquered their enemies and feared to lose through idleness their warlike endurance and skill in battle, they sought an excuse to attack the Neutrals. Shonnonkeritoïn, war-councillor to the Onondagas, now proposed to an Attiwandaron warrior, chief of the clan of the Eagles, that the young braves of the two tribes would meet in occasional combats in order to stimulate, from time to time, their warrior courage. The Neutral chief after repeated refusals at last consented, though reluctantly. In a skirmish which followed, an Iroquois warrior was taken prisoner and burned at the stake by the Neutrals. As there had been no actual war declared between the tribes, this mutilation and burning provoked the indignation of the Five Nations. The Onondagas, to avenge his death, entered upon the lands of the Neutrals, and the Mohawks and Senecas marched to the assistance of their countrymen.

An additional reason for the war is given in the "Relation, 1651" where it is stated that the friendly reception and hospitality extended to a fugitive band of Hurons, after the ruin and dispersion of that unhappy nation, excited the wrath of the Iroquois, who for some time were impatiently awaiting a pretext to attack the Neutrals. Then there was a tradition among the remnant of the Neutrals who had escaped from their enemies and fled to the regions south-east of Sault Sainte Marie, that the refusal of the Attiwandarons to surrender a Huron girl, a captive of the Senecas, who had escaped and fled to the Neutrals for protection, brought on the war. But this tradition is contradicted by the "Relation, 1659-60" where it is stated that the few Hurons dwelling with the Neutrals and those who fled to the Neutral lands for shelter after the ruin of their country were delivered to the Iroquois as a peace-offering. Be the cause of disruption what it may, it is known that in 1650, the war between the Neutrals and the Iroquois began and was prosecuted with a ruthlessness and savagery for which the contending parties were notorious. In the midsummer of this year the Senecas and Onondagas attacked a frontier town of the Neutrals within whose palisaded walls were 1,600 warriors. After a siege of a few days, the Senecas carried the fortified town and made it a slaughter-house. The following year they stormed another town, and after butchering the old men and children at

the breast, carried off a number of prisoners and among them many young girls reserved as wives for Onondaga and Seneca warriors.

In retaliation, the Neutral fighters captured a frontier town of the Senecas, killed and scalped two hundred men and wreaked their vengeance on fifty prisoners whom they tortured and burned to death. When the Senecas told their countrymen the story of the atrocious torture of their warriors the whole Iroquois confederacy—the Five Nations—supported their cause. They sent 1,500 of their best fighters across the Niagara River, who, in rapid succession, stormed village after village, tomahawked and scalped the inhabitants and returned to their own country dragging with them troops of prisoners reserved for adoption or the flames.

This campaign of the Iroquois warriors led to the ruin and dispersion of the Neutrals. The inland and remote towns were struck with panic. They abandoned their homes and their hunting grounds, fled to the west and north-west, preferring the horrors of retreat, hunger and exile to the rage and cruelty of their ruthless conquerors. The unhappy fugitives were devoured with famine and in scattered bands wandered through the forests, through swamp-lands and streams in search of anything that would stay the devouring pangs of hunger. In time the tribal remnants found homes among the northern Algonquins. In April, 1652, it was reported at Quebec that those of the Neutrals who fled to the headwaters of the Susquehanna had joined with the Andastes in an attack on the Senecas. In July, 1653, word was brought to the same city that some Algonquins, with several hundred Neutrals and a remnant of the Petun Nation, had assembled in council near the Straits of Mackinaw. They are mentioned as an independent nation in the "Journal of the Jesuits," July, 1653. Henceforth, they lose their tribal identity and affiliating with the Tionnontates become known as Wyandots. Nicolas Perrot in his "Memoire" (chap. xiv. ed., 1864) refers to them as "Huron neutres" and as "Hurons de la nation neutre."

Father Fremin in a letter embodied in the Jesuit Relations, 1670, says that in September, 1669, he visited the Oneida village of Gandoga peopled with the remnants of three nations destroyed by the Iroquois. Among them were the descendants of the slaughtered Neutrals who were adopted by the Iroquois and incorporated into the Oneidas to fill the places of those of the tribe lost in war. This is the last time the Neutrals are mentioned in the annals of "Nouvelle France," now the Dominion of Canada.

NOTE:—We have in this article on the Attiwandarons, quoted so freely from the Jesuit Relations that an explanatory note may be found serviceable. The historical value of these Relations has of course been long understood by students of aboriginal and missionary life in Canada, but to the general reader, even to the educated general reader, the Relations were somewhat of a myth owing to

*These Neutrals were probably the Detroit band referred to by Perrot and induced by the Iroquois to abandon their Huron and Algonquin affiliations, and settle in the villages of the Five Nations. Here is what Perrot writes: "*L'Iroquois continua aussy la paix avec un autre village establi au Détroit que l'on nomme Huron de la nation neutre, par ce qu'ils n'épousèrent par les interets de leurs, alliez et qu'ils s'estaient tenus dans la neutralité. Les Iroquois les obligerent cepedent de quitter le Détroit et de venir s'establis avec eux*":—"The Iroquois also kept the peace with the people of another village established at Detroit, who were called Huron—Neutrals because formerly they did not identify themselves with the interests of other tribes, but observed between them a habitual neutrality. The Iroquois, however, compelled them to leave Detroit and to settle among themselves."—Memoir par Nicolas Perrot, Tailhan edition, page 80.

their rarity even in large libraries. At a very early period their value was recognized by Charlevoix, who, in 1743, wrote: "There is no other source to which we can resort to learn the progress of religion among the Indians. . . . Of the Apostolic labours of the Missionaries they give very edifying accounts."

In 1858, the Relations were published by the Canadian Government and made available to a limited extent. Parkman, the Harvard historian, was the first writer to make their merits fully known on this continent. In his preface to his "Jesuits in North America" (1879) he wrote as follows: "The sources of information concerning the early Jesuits of New France are very copious. During a period of forty years the Superior of the Mission, sent every summer, long and detailed reports embodying or accompanied by the reports of his subordinates, to the Provincial of the Order where they were annually published in duodecimo volumes forming the remarkable series known as the Jesuit Relations. . . . I should add that the closest examination has left me no doubt that these Missionaries wrote in perfectly good faith, and that the Relations hold a high place as authentic and trustworthy historical documents."

The "Relations de la Nouvelle-France" open with the report of Père Biard in 1616; then comes, in the long series, that of Father Charles Lalemant, written in 1626. The duodecimo volumes referred to by Parkman were published in Paris and covered the years from 1632-1672. These comprised 41 volumes, 39 of which carried the title: "Relations" and two, that of "Letters" (1654-55 and 1658-59).

The entire series, edited by Ruben G. Thwaites, assisted by a corps of expert translators, may now be obtained—translated into English—from any of our large public libraries.



SCULPTURED MONOLITH.
(Quirigua, Guatemala.)



PRIMITIVE CIVILIZATION OF THE AMERICAN INDIAN

By VERY REV. W. R. HARRIS, D.D., LL.D

Dr. Edgar L. Hewett, Director of the Archæological Institute of America, and Mr. S. G. Morely, an authority on Hieroglyphics, accompanied by two crayon artists, passed the summer of 1912 exploring and uncovering the forest-shrouded city of Quirigua, Guatemala, Central America. The existence of the weird ruin was first made known to the English-speaking world by John L. Stephens, whose companion, Catherwood, visited it in the winter of 1840-41. A description and drawings of some of the monuments may be found in the second volume of Stephens' "Central America, Chiapas and Yucatan," New York, 1841.

The New York correspondent of the "London Standard" thinks the origin of the American Indian will be solved by Dr. Hewett. The Doctor himself is almost convinced that the excavations now under way at Quirigua, and the decipherment of the secret writings on the monuments and tablets of this pre-Columbian city, will unfold the parchment which hides the origin of the mysterious Indian race. After returning in the spring of 1910 from his first visit to Quirigua, the Doctor is reported to have said: "I found the long-dreamed-of key to the origin of the American race. Here before me were monuments so clear in their symbols; building lines so definite in their form; and supplementary details of such positive character, that I realized the task was merely clearing the site and returning with replicas of the glyphs or writings, to make once and for all time, positively and irrefutably clear, the strange history of these people. . . . The reading of this mass of decipherable data means the answer to one of the world's great scientific questions."

If the eminent Archæologist thinks he can decipher the secret writings on the monuments of Copan, Palenque, or Quirigua, or that "the reading of the mass of decipherable data" will solve the problem of the origin of the American Indian, we fear he is destined to share the disappointment of many presumptuous antiquarians who nursed the same delusion long before Dr. Hewett visited Central America. If the key to the Maya or Quiche secret characters be ever found, and the glyptic writings translated, we are not so sure that they will reflect any light on the origin of the American Indian.

When Champollion found the key to the Egyptian hieroglyphics, great hopes were cherished that the problem of the origin of the Egyptians would be solved. But neither the characters on the vocal Memnon, nor those on the gigantic pillars at Thebes, nor the secret writings on the fallen obelisk at Karnac, gave any clue



COLOSSAL STATUE.
(Palenque, Chiapas.)

to the history of pre-historic Egypt. The Abbé Brasseur de Bourbourg, who spent many years in Mexico and Yucatan, translated into French, the "POPUL-VUH," the sacred book of the Quiches of Tabasco, and left us a grammar and a copious vocabulary of the Quichè language, failed in his efforts to trace, to his cradle-land, the American Indian. In his able Essay: "Sources de l'histoire primitive du Mexique," he supports the theory of a lost continent. Diego de Landa, who was Bishop of Merida, Yucatan, 1573, wrote the "Relacion de las Cosas de Yucatan," enclosing in it a complete nomenclature of the characters of the Maya calendar, and the signs of the secret writings on some of the Maya monuments, could give us only the myths and the traditions of the aged men of the peninsula, but could furnish nothing definite as to the origin of the Indians of Central America or Chiapas.

Brasseur de Bourbourg, 1854, went carefully over the pages of the Dresden, the Mexican, and all the Codexes given by Lord Kingsborough in his elaborate and costly publication, comparing them with ancient documents he had found in Mexico, yet he discovered nothing bearing upon the origin of the Indian. But, waiving all speculation and theory, we are satisfied that Yucatan, Tabasco, and Central America are destined to return the best results to the investigations of the Archæologist and of the student of ancient American history. Admitting that Mexico and parts of South America had at one time a civilization equal to that of Central America, still, Yucatan, Guatemala, and Honduras have preserved the most complete memorials of the remote past, and their monuments of the past are more accessible to examination.

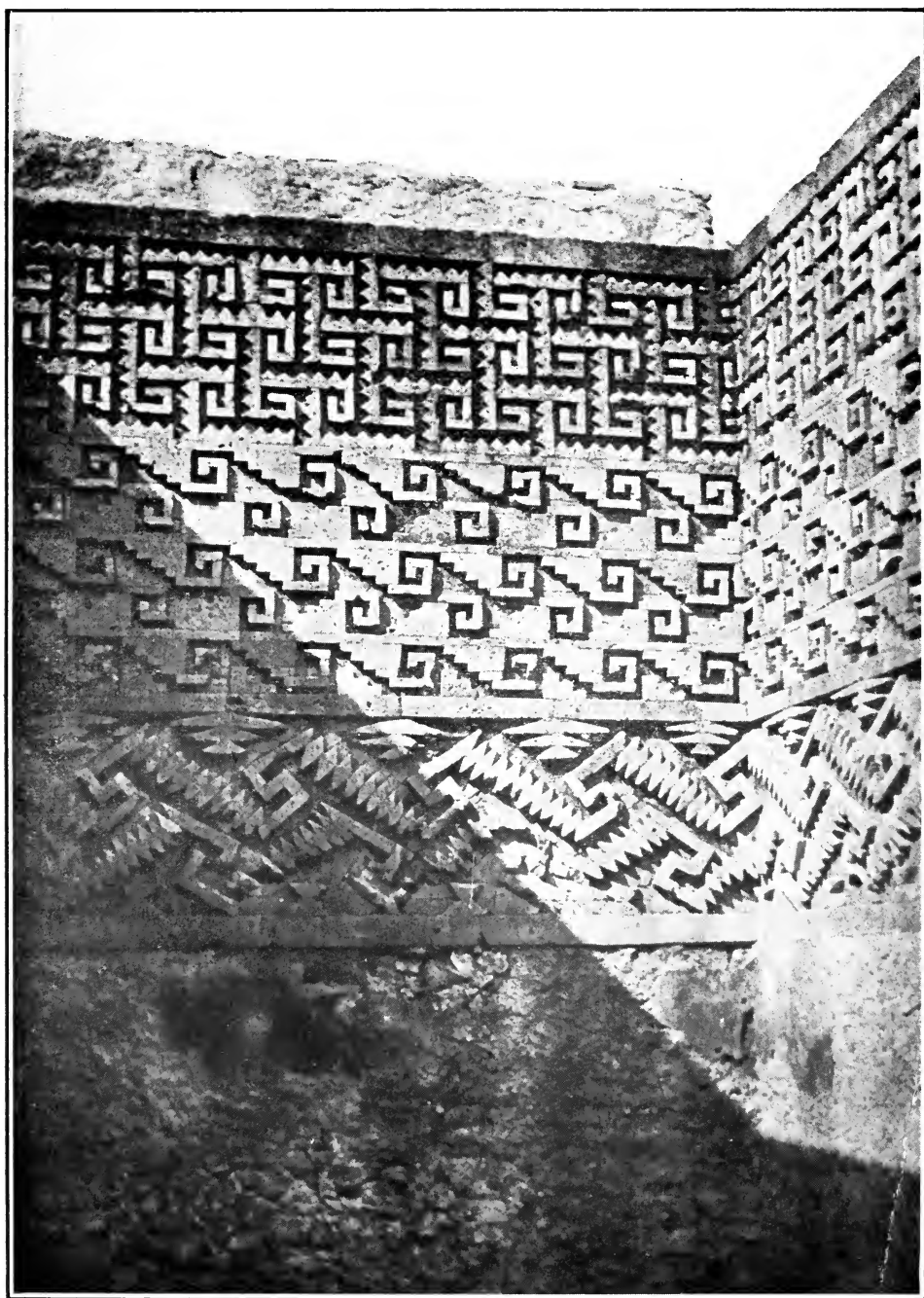
Before entering upon the study of the ancient civilization of Central America, let us hurriedly review the theories put forward on behalf of the existence of original man on our continent. Some writers regard the Indians as autochtons, a separate race created in America and for America; others ascribe their origin to a remnant of a pre-Noachic race of men, who escaped the diluvian cataclysm, and are now the oldest people of the human race. Plausible arguments and ingenious sophistries have been made and advanced on behalf of a Chinese, Welsh and Japanese immigration. Again we are confronted with innumerable volumes tracing the origin of the Indian to Jews, Canaanites, Phœnicians, Greeks, Carthaginians and Scythians. Others are of the opinion that America received its first inhabitants from the islands which lie between the extremities of Asia and America, that is to say, from Yezo, Gama's Land, and other lands, including a cluster of isles, possibly the Aleutian Islands. Then there is the Behring Strait, across which in very remote times, an Asiatic tribe is supposed to have sailed and populated America, and the "Lamanite Myth" of the "Book of Mormon" recording the sailing of Nephi the prophet with his sons and daughters from the shores of the Persian Gulf to the Coast of South America—600 years before the Christian Era. All these suppositions are now relegated to oblivion, and their ghosts will not presumably walk again. Scott Elliott, in his book: "The Story of Atlantis," returns to the theory of a lost continent, and like Ignatius Donnelly in his "Lost Atlantis," supports his theory with very plausible, if not convincing, arguments. There has been much dispute among learned men over the contention. According to one group of writers, the tradition of a submerged continent is pure fiction, founded upon a fragmentary passage in the writings of Plutarch. Another group hold the tradition to be historically true, but say that the existence of the continent is incapable of absolute proof. The great German, Schlieman, is not afraid to

imperil his reputation by contending for the actuality of the lost land. He writes: "I have arrived at the conclusion that Atlantis was not only between America, the west coast of Africa and of Europe, but that it was the cradle of civilization." Let us now glance at the civilization of prehistoric America, which induced Schlieman to express himself so unreservedly.

PREHISTORIC CIVILIZATION OF AMERICA.

In the ruins of the pre-Columbian cities of Yucatan and Central America, we see the most elaborate forms of sculpture adorning the altars, idols and buildings,—the remains of a people skilled in architecture, sculpture and drawing, and beyond doubt, excelling in arts that have perished. These sculptured Monoliths, altars and statues are not rude and archaic. In many of the halls yet standing, are arabesques fashioned in Mosaics and in grecques, and delicate tracery, not unworthy of a place in modern decorative art. The pillars and stone tablets, which carry hieroglyphics, are remarkably well executed. These hieroglyphics, or secret writings, were executed in characters known only to the priests and learned men of the race. We have not as yet been able to decipher them, so that the characters on the monuments of Copan, Palenque and Mayapan furnish us no data or information. The Maya system of symbolic writing appears to be a species of mnemonics. The hierographs on the Palenque tablets, now in the National Museum, Mexico City, are in perpendicular rows, and for aught we know the characters may be alphabetic and a written language. On these tablets we perceive a highly artificial system of writing, and to interpret it, the Aztec or Mexican picture-writing affords us no help.

The architecture and system of writing of these prehistoric people are different from those of any other known race, ancient or modern. They are of a new order, and are entirely and absolutely anomalous. They stand alone. The cultivation and refinement, such as it was, was not derived from the old world. Without models or masters from abroad, their architecture originated among themselves. They were a distinct people, having an existence independent of Asia, Europe, or Africa, apparently indigenous like the animals, plants and fruits of the soil. No analogies of art connect the ancient civilization of America with that of any known people. In their art they copied Nature, and at Uxmal, in Yucatan, and Copan, in Honduras, we gaze upon buildings not unworthy to stand side by side with the best examples of ancient Egypt and Assyria. These primitive Americans were skilled in medicine and surgery. The "*Notes sur la medecine et la Botanique des Anciens Mexicains*," published in book form lately by the Vatican Polyglot Press, contains many items of information that must surprise those who think that only in recent times have we made valuable discoveries in therapeutics, and that all serious investigation in medicine, or whatever has been done in surgery, has been accomplished by European methods and by the men of Europe. Among the Mayas of Yucatan and the people who antedated the Toltecs in Mexico, doctors were constituted a distinct and separate body of men. They formed a class by themselves, and the sons inherited the profession of the fathers. They made use of a multitude of drugs, and were familiar with diuretics, emetics, dietetics, febrifuges, emollients and vermifuges. They had many medicaments for all forms of indisposition. They administered their medicine in many different ways: as decoctions, infusions, oils, ointments and plasters. Certain gums and resins they applied as electuaries. They recommended vapor-baths, and varied the treat-



INNER WALL OF TEMPLE.
(Mitla.)

ment to suit the disease or the individual patient. The historian d'Anghiera states, that in his own time, 1524, when European physicians in Mexico failed to cure their Spanish patients, the native doctors were sometimes sent for, and often effected a cure. Even as late as the days of the Conquest, when Maya and Aztec civilization had greatly declined, Cortes and his men were successfully treated by native doctors for illness and wounds. Cortes was so convinced of their skill, that he wrote to the Spanish Court asking that no physician of Spain be allowed to come to the colony. These native physicians anticipated modern advances for they made use of the seeds of certain plants for anæsthesia and a distilled spirit for lessening the painfulness of operation. Last August, Professor Marshall Seville of Columbia University, New York City, returned from two months' excavations in Esmeraldas, Ecuador. He brought back with him skulls of South American men, who lived five hundred years before the discovery of America. The teeth in the jaws were filled with an alloy, and crowned with metallic caps. In all cases, he assures us, the workmanship is almost the equal of the modern dentist's art.

Sahagun, who studied their system of medicine very carefully, hints even of antiseptics. It was not alone in the use of drugs, however, that these doctors were skilled. When the Spaniards landed at Vera Cruz, in 1519, Native Botany was in advance of that of the old world. Several centuries later, the genius of Linnaeus enabled him to substitute for long descriptions of plants, a concise designation,—a generic name and a specific classification. But many centuries before the time of the great botanist, these ancient scientists had something resembling it, and possessed a botanical nomenclature of their own. Their classification was superior to that of Europe, before the birth of Linnaeus.

They had traced the influence of temperature and elevation upon plants and shrubs, and to some extent had systematized their knowledge. Though their botanical knowledge, compared with our own, was imperfect, we, nevertheless, have abundant evidence that they had advanced far on the road to mastering the science of botany.

The Department of American Antiquities in the National Museum, Mexico City, is the most notable in the world, and is a veritable treasure-house of pre-Columbian relics and prehistoric "finds." In one room of the department are exhibited examples of famous Aztec picture-writings and Aztec maps and drawings of Tenochtitlan, now the City of Mexico. Here also are arms, jewels, glazed pottery and cloth made from the fibres of Heneguen, agave and the Maguey plant. Beautiful specimens of feather cloth woven from extremely delicate tissues of cotton, combined with feather and rabbit's fur, polished crystals, obsidian or volcanic glass manufactured into delicate objects of ornamental or economic value; figures of gold and silver, exquisitely wrought, and filagree ornaments of beautiful design, fill many cases in the Museum.

Anthropologists, such as d'Orbigny, de Bourbourg, and Heinrich Schlieman, are of the opinion that the region now known as Yucatan, Chiapas and Tabasco, was the cradle-land of primitive American civilization. From this land went out, in the very remote past, colonies into South and Central America, carrying with them the arts of civilized men. From here also, detached bodies went into Mexico and the North lands, where they built Mitla and other cities, the wonderful ruins of which excite our astonishment and admiration. In these lands we find the tidal remains of an ancient race, which welled up from its primal springs in Yucatan and thence overflowed, multiplied and rolled on over the entire continent.



TEMPLE FIGURE.
(Copan, Honduras.)

As the overflowing population rolled far away from its origin and its source, it lost the best part of its civilization. It lost its social strength, its historic memories, arts, tradition, crafts, and, in some instances, almost the very means and methods of subsistence.

In time, the womb of primitive civilization itself became gangrened, and when Cortes entered Mexico and Grijalva landed in Yucatan, they found the Aztec and Maya civilization decaying, disintegrating and decomposing. Some of the sculptured statues are of heroic dimensions. The curiously designed figures, the unfamiliar carvings on the altars and the panel work on the inner walls of Copan are not surpassed by the temple specimens of Egypt and Assyria on exhibition in Paris and London.

Mournfully beautiful are the ruins of the prehistoric City of Copan, surrounded by a forest painful in the intensity and duration of its silence. It is a phantom in the wilderness, and when we demand of it to tell us how many centuries have passed away since the quarry was opened for these stones; how long since the builders began the city; how long was the city inhabited, and when was the city deserted, there comes no answer to our questionings. If, as it is now conceded by students of Central American history, the Quiches preceded the Mayas, and another race, antedating the Mayas, built the cities whose ruins now exist all over Central America, Yucatan and Mexico, what assurance have we that many civilized communities did not successively appear, run their course and perish in the veiled ages of prehistoric times. And by prehistoric times, I mean the ages between the creation of man and the beginning of authentic history. Under the limitations of our information and knowledge we are free to assume that the Quiches, Mayas, Yucatecas and the Indians now in Central America and Yucatan were and are the descendants of the civilized people who built the cities now abandoned. In order to account for the magnitude and splendor of the temples and public buildings of these cities a centralized form of government must have existed. These immense buildings could have been erected only by the expenditure of great labor—probably slave labor—and under a highly organized system of superintendence. Possibly the government was an imperial autocracy or it may have been like that of Greece, which was in religion and language one nation though politically a confederacy of sovereign states.

Who may deny that the savage or barbarian tribes who roamed the plains or peopled the forests of North America in the memory of men yet living, were not scattered fragments from the wreck of this civilization that in remote ages was lost in lurid storms of war, or disappeared under adverse conditions, which then, as in our own times, made and make for the decay of national unity, national virtue and character.

Defining in particular the social and the family state and condition of American Indians with reference to the knowledge we have acquired of them, we note that the same fortunes have followed the migrations of the dispersed and scattered race.

When human beings become destitute and desperate conditions of life make them so, barbarism and savagery will, in time, overtake them. When driven by the fortunes of war, or under the dire pressure of famine, from its own land, the flying remnant gradually separated from the civilization it carried from its home, it lost its culture, just as we would lose it now with all our refinement, if we were forced to live their lives, and were subject to the same conditions and hardships.

And in the forests to which the wanderers fled for shelter and safety, we can well imagine desperate conditions of existence, and therefore impossible conditions of civilization.

But from what people or from what land did Yucatan inherit its civilization? The men who colonized the peninsula, who built Xumal, Mayapan and Palenque, were, in the material order, civilized. They could not have risen from savagery, for there is no record in the annals of our race of any savage tribe of men advancing, unassisted by civilized man, one single step on the road to civilization. This is history. We must then assume that the men who colonized Yucatan were civilized. Let me, by way of parenthesis, mention that the chronology of the Bible, the age of man upon the earth or the universality of the Noachic deluge, have not been authoritatively settled by the Christian Church.* We must also and permissibly take it for granted that these civilized inhabitants of Yucatan lived before the smelting of iron ore was discovered, for if these first inhabitants came from Europe, Asia or Northern Africa, they could not have forgotten the art of smelting or the utilization of iron. The axe, saw, plough, shipbolt, spear-head, and chisel were, according to Herodotus, known to all the civilized races of antiquity. The civilization of Egypt goes back to the deluge. The use of iron was known in the time of Tubal-Cain, son of Lamech, who antedated Noah. It was known long before the building of Solomon's temple, before the time of Hesiod and Homer. Iron reaches back as far as history. Now notice this: No tempered copper or implement of iron was ever found amid the remains of ancient America, or indeed indications that it was ever known or even heard of.† It is true there was no iron ore in Yucatan, but these civilized people, if they had known the use of iron, would have sent out prospectors, even to Durango, where they would have found a mountain of iron. Moreover, huge aerolites, and holosiderata were and are found in many places on the surface from Cholula and Zacatecas to Vera Cruz and Chiapas. If this continent were at any time peopled by a civilized race from the old world, it must have been long before mankind was acquainted with the properties of iron. Nor could they have lost the art of smelting if they had descended into barbarism and rose again, for among the savages of Equatorial Africa, the smelting of iron remained with them in their debasement. It is also a singular fact, that although Cortes, Bernal Diaz, and the Spanish writers of the early Sixteenth Century are eloquent in their admiration of the material and

* Some of my readers may feel disposed to challenge this statement. If so, I may remind them that at the meeting of the "Congregation of the Index," called to examine the dissertation of Vossius on the "Age of the World," the learned Mabillon was invited to give his opinion on the contention of Vossius that the "deluge was not universal either in its application or in its effects." Mabillon replied that the theory of Vossius could be accepted or at least tolerated:—"Principio haec opinio nullatenus continet errorem capitalem neque contra fides, neque contra bonos mores." Such was the opinion of Mabillon—a doctor of theology. The Congregation, which met in Rome in 1686, consisted of nine cardinals and was attended by many bishops and distinguished members of the religious orders. The thesis of Vossius was critically examined and not condemned. The details of the examination are given in the posthumous writings of the distinguished Benedictine, Don Mabillon (Paris, 1724, p. 59, etc.).

† "Que en Yucatan ay muchos edificios de gran hermosura que es la cosa mas senelada que se ha descubierto en las Indias, todas de canteria muy bien labrada sin aver ningun genero da metal en ella con que se pudiesa labrar.—There are in Yucatan many buildings of great beauty, the greatest wonders we have yet seen in the Indies. These buildings are all of stone, which are cut into beautiful shapes, something surprising, since the builders had no metal tools to help them in their work." (Relacion de Yucatan, Landa, 1571.)

social civilization of the Aztecs, they make no mention of domesticated animals. Such domesticated animals as the cow, dog, horse, goat, sheep, hen and cat, were introduced by the Spaniards. In the Aztec codexes, or in the traditions of any American race, there is no mention or memory of a domesticated animal. Nor can we, by affinity of language with any spoken or written tongue of the other continents of the world, trace any relationship between these Indians and other races of men.

Nothing is so indelible as speech. Sounds that in unknown ages of antiquity were spoken by the races of the earth still live in their languages. Languages, like seeds, never entirely die. They stay with the soil, and when nations or tribal families disappear forever, mountains repeat and rivers murmur the voices of these races that have disappeared, been absorbed or were annihilated. All European, African and Asiatic languages have been traced back to their sources, but the Nauhual and its cognate tongues stand alone, and throw no light on the origin of the people. Philologists like Gallatin, Duponseau and Mueller, say it differs radically from all other known languages. No theories of derivation from languages of the old world sustain the test of critical examination or of grammatical construction. Comparison with the Sanskrit, the Hebrew, the Phœnician, Japanese, Chinese, Celtic or Scandinavian languages, establishes no affinity between them and any primitive American tongue. As the human voice articulates not more than twenty distinct sounds, whatever resemblance there may be found to exist between any other language and the Maya or Nauhual is of no ethnic value.

While endeavouring to solve the problem of prehistoric man in America, we are confronted with another issue of great import: When America was discovered, strange and unfamiliar animals prowled through its forests and roamed over its plains. Fresh water fish abounded in lake and stream, and reptilian life was everywhere. These were here ages before the coming of man. Fossil remains of extinct animals and saurians of giant size and strength, such as the tyrannosaurus, the triceratope, the diplodocus, the iguandon, and of huge mammalian monsters, have been recovered from petrified clay in Colorado, Utah and Wyoming.* So that if we refuse to admit the possibility of a lost continent, or a bridge joining the new to the old lands, we are confronted with the theory of a separate creation, which can neither be admitted nor is admissible. The possibility of a lost continent so ably contended for by Le Plongeon, Heinrich, Darwin, Donnelly, Schlieman and many eminent archæologists, carried a plausibility that obtained for it a large and influential following.

But the theory when attacked from the side of science and cosmogony, could not then resist the strength of the logic and arguments of its enemies, and it disappeared. But it did not die. It is very much alive to-day, for since the battle between the opposing forces, fought sixty years ago, new discoveries have been made and new territory explored.

The eminent traveller and antipodean explorer, Clement Wragge, who last

* There is a wonderful specimen of the diplodocus in the Carnegie Museum at Pittsburgh. It was found in the lower cretaceous hard-pan, in 1900, in Wyoming, U.S. The skeleton, when uncovered by the members of the Carnegie expedition, measured eighty-three feet. The creature was herbivorous, and is supposed to have lived in the water and in the marsh lands. After it was mounted in Pittsburgh, Mr. Carnegie presented reproductions of the monster to five of the leading Natural History Museums of Europe. The largest known find of these huge animals is the giantasaurus, dug up in German East Africa about a year ago. It measured one hundred and sixty feet in length.

summer returned from the Easter Island of Waihu, Pacific Ocean, 2,399 miles west of Chili, is persuaded that the rock carvings he discovered near the Bay of Islands and the Cyclopean Monuments found on Easter Island are of very ancient date. Discussing the origin of these relics he writes: "The people who built the wonderful statues and cut the marvellous inscriptions on Easter Island, had nothing to do with the Polynesians, but are allied to those dwelling in Central and South America long ages ago. In fact they are to be referred to an Atlantian race."

Dr. Paul Schlieman, a grandson of the Archæologist, Heinrich Schlieman, writing to the "London Budget" last May, tells us: "I am as satisfied as I am that I exist, that before the beginning of the Eocene age, perhaps in the Cretaceous Period, a great continent, inhabited by a civilized race, existed in the Atlantic Ocean. The American Indians are the descendants of this race."

When Mr. Schlieman's promised book appears, we may examine at leisure the grounds on which he builds this declaration.

Herr C. Gagel, with the thoroughness of German scholarship, in a recent work he has given us on the same subject, endeavors to prove that a great continent did once exist in the Eastern half of the Atlantic Ocean, and that the volcanic islands of the Azores, the Canaries, and the Cape de Verdes, now represent all that is left of it above the waters. He is supported in his contention by M. Pitard, who lately found in the Canaries unquestionable cretaceous deposits.

It is possible that the supposed submersion of the Continent occurred many thousand years later than the Cretaceous Period, for in Central America, and on some of the islands of the Atlantic, there yet exist types of animals and examples of vegetation belonging to the Pliocene Age, the last division of the Tertiary Period, and near to the known appearance of man.

The problem of a submerged continent has by no means been solved. Recent discoveries afford the possibility of making others, and from the liberal encouragement given by the late Morris K. Jessup, in research work among the coast tribes and those of Northern Asia, some further light may be reflected on the origin of the American Indian. In any case, it is well to remember that when the elder Agassiz first propounded the theory of a glacial age, he encountered a storm of opposition and ridicule.

Geology and political geography are but of yesterday, and we cannot predict what advances and discoveries may be made before the opening of the next century.

Day by day we are now uncovering the carefully guarded secrets of the earth. Though wonderful disclosures have already rewarded enthusiastic research, and our expanse of human knowledge greatly broadened, yet the fringe has only been felt, and the great secrets of the earth and of the duration of human life on this continent are yet to be revealed. We are prepared to accept and to sift at all times new evidence, and to abandon any theory found to be untenable or out of harmony with later disclosures.

CONCERNING A FEW WELL KNOWN INDIAN NAMES.

By ARMON BURWASH, Armprior.

CANADA.

How the Indian name Canada came to be applied to this country is what the Indians themselves would call a "Big Medicine," meaning thereby a mystery. The word Kanata or Ganata, denoting a town or settlement, is an Iroquois word and is in common use amongst the Iroquois yet; but at the time when the earliest recorded history of Canada began to take shape, all of this country, from its most easterly sea-board to Lake Ontario, was occupied by Algonquin tribes. Now the Algonquin word for a town or settlement is Odanah. Why then did the early discoverers coming as they did from the east, apply an Iroquois instead of an Algonquin name to the country?

Although there is no direct evidence to that effect, one is almost forced to explain this Big Medicine by assuming that before the date of recorded history the Iroquois must at some time have occupied the lower St. Lawrence. And this assumption is much strengthened by the statement of Abbé Faillon that "many of the words used by Cartier in 1535 were Iroquois words."

OTTAWA.

Another Big Medicine is the application of the name Ottawa to the Ottawa River.

Champlain in his diary of his voyages up the Ottawa in 1613 and 1615 always mentions it as the river of the Algonquins. He refers to the Ottawa Indians indeed but states that their country was north and west of the Georgian Bay. And Père Marquette writes in 1668 that "The Ottawa Indians were the first to open trade with the French in western furs," but he also places them on the Georgian Bay. It does not appear that the Ottawa Indians ever lived on the Ottawa River, in fact the evidence all points the other way.

The River is known to-day by the Indians who live upon its banks above Lake Temiscaming as the Kitchi Sippi, that is—The Grand River—and in the Government Reports of 1780 on the fur trade it is spoken of only as the Grand River.

So the solution of this Big Medicine seems to be that the river was not named from the Ottawa Indians but obtained its name in the same way in which they obtained theirs. Ottawa is the Algonquin word denoting Trade. The Ottawa Indians were so called because they were the great trading tribe of the Algonquins, and the Ottawa River was probably first called the Ottawa when it began to be the great trading route between the West and Montreal.

GATINEAU.

• The Gatineau, the largest tributary of the Ottawa, owes its name to a custom common to many savage races, that of describing themselves as "The Men" or "The People."

Etinook is a Cree word signifying People, in this case of course Indians, and Ga Etinook is The People, thus Gatineau becomes "the river of the people."

Etinoo, Person, (the plural is Etinook, meaning persons or people) seems to be one of the few words common to all of the Northern Indian languages. In a more or less modified form it runs through all the dialects of the Algonquins and appears as Etschinac in the Iroquois.

A good instance of the way in which names of this kind become corrupted is shown in the present name of one of the tributaries of the Gatineau. The early French voyageurs translated Ga Etinook into Les gens de terre, (the men of the country) and modern map-makers have transformed this into Jean de terre, the way in which the name of this stream is now written.

These same voyageurs named the Indians of the upper Gatineau, Les Têtes de boules, (round-heads) not on account of any peculiarity in the shape of their skulls but because of a round fur hood which they were accustomed to wear during cold weather.

MADAWASKA.

The Madawaska, the largest of the Ontario tributaries of the Ottawa, is named from Mata, the fork of a river, and Aushka the sound of a rippling current—Mataw-aushka—meaning the river with the rippling current at its mouth. The w sound was inserted simply to make it easier of pronunciation. It must be borne in mind that the Indian tongues were not as flexible as ours are. Only a very few of all the Algonquin tribes could sound the letter R at all, and even that few in but a very modified form. Anyone looking at a map of the vast territory once occupied by Indians of the Algonquin race must notice that there are almost no names on it containing the letter R. And even of the very few that do appear there almost all can be traced to Iroquois or Huron sources.

In the Indians of the Madawaska and Gatineau Rivers we find proof that sub-tribal or clan divisions had a marked effect on physical stature. Champlain in his diary mentions a report that he had heard, to the effect that the Indians of the Upper Madawaska were men of very great size. This report appears to have been well founded. Nikik (The Otter) who was chief of this clan about fifty years ago was well known to the lumbermen of that day and was a man of immense size and tremendous physical strength, and the members of the clan as a whole were considerably above average height and of heavy build. On the other hand the Têtes de Boules were and are rather short men, though of sturdy form and possessed of great endurance. Yet these two clans belonged to the same tribe.

PTEWAWA.

This name is in the original Pitchawawa, meaning the long river. Pitcha means long in the sense of time, not in the sense of distance. So the actual meaning of the word is the river that it takes a long time to travel over. Anyone who has had any experience on that turbulent stream will feel that the name is well applied.

MATTAWA.

From Mata, a fork, in this case meaning the important river fork. It was at the mouth of this river that the great travelled route branched off from the Ottawa and led up the Mattawa River and by Lake Nipissing and French River to the Georgian Bay. And for many a long year this was practically the only route of trade open to the French and their Indian allies between the West and Montreal, the upper St. Lawrence being absolutely closed to them by their Iroquois enemies.

Although the Algonquin race far outnumbered the Iroquois, yet they lived in constant dread of them. So much so was this the case that the old familiar friend of our childhood, the Bogey Man, appeared in the Cree lodges as the Nottaway (the Cree name for the Iroquois) for even in comparatively recent days it was no unusual thing to hear a Cree squaw tell a misbehaving papoose that if it did not behave itself the Nottaway would catch it. Possibly it was with some feeling of this kind in mind that the Indians of the Georgian Bay gave Nottawasaga Bay its name. It means the outburst of the Iroquois, as it was through it that they burst forth on their terrible raids against their northern neighbours.

QUEBEC.

Quebec takes its name from Kepek, the Ojibway word for a strait or narrows, referring to the narrowing of the St. Lawrence near the city of Quebec. The same root word is found in the name of Lake Kipewa, a lake composed almost entirely of deep bays and narrow straits.

ONTARIO.

Ontario is probably derived in the first instance from Ihonataree, an Iroquois word meaning The Lake. The same word was used by the Onondagas to designate the sea. It was evidently applied by them to big waters of any kind.

TORONTO.

Garunta is the Iroquois word for Tree. At some time in the past some particular tree must have marked some *specified spot whereabout now stands the city of Toronto*.

A curious instance of how a language becomes changed is shown in the name which the Indians of the Ottawa now apply to the Canada Jay—Kokoshwee. It appears that from the Gulf of St. Lawrence to Hudson's Bay this bird was originally called Wissakejon, from which the Hudson's Bay men deduced Whiskey Jack, the name by which it is best known to travellers in Northern Canada. When the French introduced Pork amongst the Indians these latter named it Kokosh, probably a corruption of the word Co'hon, a pig. On their part the French named the Jay, no doubt owing to its fondness for meat, Mangeur du Lard, Pork-eater. The Indians accepted this new name and translated Pork-eater into Kokoshwee, the name by which they designate it now.

The foregoing are a few Indian names with which we are all familiar. It is to be hoped that some general plan will soon be adopted to put on record the meaning of as many as possible of Ontario's Indian names, before it becomes too late. In spite of the fact that recent Government Reports state that their numbers have increased, the Indians, as a race, are a vanishing race. It may be that the number of individuals is greater, but their customs, occupations, and manner of life are all changing, and even their language is to a large extent becoming corrupted. And at the rate at which settlement is now sweeping over this country, it will not be long until the only place where a true Indian can be found will be in that happy country, where according to Algonquin tradition, the current of the shining rivers runs both ways, down one bank and up the other, so that no good Indian has ever to paddle against the stream. And where every lake has many winds all blowing at once, and each canoe no matter what its course has a fair wind of its own.



ONTARIO EFFIGY PIPES IN STONE.

By COL. GEO. E. LAIDLAW.

2ND PAPER.

Since the appearance of my first paper on this particular type of pipe sculpture, which appeared in the Ontario Archaeological Report for 1902, a number of specimens have turned up in Ontario, and information and outlines have been received about others in the United States from authentic sources, which have been embodied in this paper for the sake of comparison.

For the benefit of those who have not had the opportunity to see the above report, which I believe is now out of print, I will reiterate that my object in writing these papers is more to give minute description than in theorizing and speculating on the occurrences of this type of pipe sculpture.

The Reports mentioned in this article are Ontario Archaeological Reports issued by the Board of Education, and the museum mentioned is the Provincial Museum of Ontario, except when otherwise stated. Also the measurements are in inches and the weights are avoirdupois, except when otherwise mentioned.

ONTARIO SPECIMENS.

No. 11,103 which appears as fig. 31, p. 36, Report 1889, also fig. 229, p. 83, Primitive Man in Ontario, and has some resemblance to a large stone ring, with a protuberance on the periphery, is a large and massive unfinished specimen from Nottawasaga Township, presented to the museum by Mr. Angus Buie. This specimen which is wedge-shaped and almost circular in outline, except where the head projects, clearly and unmistakably shows that it was intended for an animal pipe of rather large size. Though not nearly so far advanced in manufacture as the Leith pipe (No. 26,544), it shows some interesting features. It is much shorter in the muzzle in proportion to size; and above and below the large central hole of oval form are pecked spaces showing that the ultimate idea of the maker was to make two more holes, similar to pipes figs. 19, 20, 22, Report 1902. There are also a well defined muzzle, eyebrows and a ridge along top of nose. This specimen weighs 1 lb. 13 oz. avoirdupois. Material being a close grained dingy blue argillite.

Dimensions, $5\frac{3}{4}$ inches long, 4 inches wide and $1\frac{3}{4}$ thick in thickest part, and shows nothing but purely aboriginal methods of workmanship.

These wedge-shaped specimens are thickest at the head and shoulders, thinning down to the front and bottom.



No. 11,103.

The oval hole in middle is counter sunk on both sides. Mr. Boyle remarks in *Primitive Man*, p. 93, that "as an unfinished specimen it possesses many instructive features as to methods of working stone."

No. 26,544, fig. 1, p. 48, Report 1903, is another massive specimen of unfinished animal effigy pipes; the surface of which is so smooth and even, and lines so regular, and angles so distinct, that it gives one the impression of having been made with European tools, compared with the Buie specimen No. 11,103.

This is a nearly finished specimen and in this case shows that the bowl was intended to be bored last, evidently with a metallic drill.

The surface of pipe shows very few of those scratches noticed on other pipes. The treatment of the head is bold and clear and needs only a few details to be complete. This pipe has the distinct wedge appearance noticed in several other pipes of this class, and bears a general resemblance in make to the Mayor pipe, p. 43, Report 1902, and p. 18, Report 1912.

Dimensions: Height $6\frac{7}{8}$ inches, width 4 inches, thickness $1\frac{3}{8}$ at back to 7-16 at lower front end. Weight, 1 lb. 14 oz. Locality, Leith farm, Township of Binbrook, Wentworth Co., Ont. Presented to museum by Mr. C. W. Hartman of Cincinnati. Has well defined head, eyebrows and muzzle. Material, striped Huronian slate. The bowl hole is bored $\frac{1}{2}$ inch in depth. The large central hole is of squarish outline with prominent rounded corners. There is the beginning of another hole, by pecking, between the central hole and the head, on the left side.

No. 26,754. Fig. 33, page 26, Report 1904, also page 101, Report 1903.

This very large stone pipe, which is supposed to resemble a bear, was found in August or September, 1902, on lot 6, concession 20, Tiny Township, Simcoe Co., Ont., by Mr. T. H. Newberry, who disposed of it to Mr. Oliver Glaspell of Powles Corners P.O., Fenelon Township, Victoria Co., Ont., from whom the writer obtained it and presented it to the museum.

This was a surface find on the route or trail of the Indians between Sawlog Bay and the highlands of Tiny. Was unaccompanied by other relics. May have belonged to the later Hurons or the Algonquins who succeeded them.

The pipe was in a fragmentary condition and is now restored minus the fore feet, and a portion of the frontal bar.

Material, dark grey slate; posture similar to other animal pipes under discussion. Dimensions: $6\frac{3}{4}$ inches in perpendicular height. Distance between parallel lines at back and at nose, $4\frac{1}{4}$ inches. Greatest thickness of body from side to side, 2 inches. Greatest depth of body from back to front, 2 11-16 inches. Length of head, 2 3-16 inches. Breadth behind ears, 2 7-16 inches. Stem hole bored with a tapering drill; bowl shows plainly drill rings, and contracts very rapidly, is $2\frac{1}{2}$ inches deep and $\frac{3}{4}$ wide at top. Stem hole is in the back. Eyes are large, deep circular depressions. Ears prominent and rounded, the right one evidently being slightly broken at one time and then ground smooth. Ear holes slightly defined as also are the nostrils—most rare occurrences. No slots or markings on surface of pipe other than those that represent the claws. No basal perforation, though there are deep depressions produced by boring where the basal perforation is usually situated in these pipes. A deep nick terminates each hind foot, separating it from the frontal bar, thus showing probably that the designer did not intend the frontal bar as a branch clasped by the feet as in other cases, but rather as a produced tail. Hind paws slightly raised from body. The portion of the frontal bar immediately opposite the hind feet is slightly larger



No. 26,544.



No. 26,754.

than the remaining portion. The top of the frontal bar, and the forefeet are missing. Mouth strongly defined, face very much "dished" or "hollow" strongly resembling a raccoon's, but the jaws are too long in proportion, and too square at the end to resemble that animal in any marked degree. The drill has been used in forming the throat, and marks of sawing and rubbing appear. Are these what McGuire calls "file marks" in his "Aboriginal Pipes, etc."?

The material changes in color to a dirty purple on the frontal bar. Weight, $2\frac{1}{2}$ lbs. avoirdupois. It has been suggested that this specimen represents the brownish variety of the common black bear. At any rate the contour of the face is directly opposite to that of the Bolsover bear pipe, p. 40, Report 1902. This pipe is of purely aboriginal workmanship, the design being bold, the head resembling a style of Huron clay pipes. This pipe though called a bear pipe shows a composition of features: in the large round eyes and hollow cheeks of a raccoon, and the strong heavy jaw of an old dog wolf, and might be equally well named after either of these animals.

The marks of boring on the surface of body show the use of a blunt drill.

Mr. Boyle in referring to this pipe, p. 28, Report 1904, says: "The surface has been brought to a condition of smoothness, but not sufficiently so to remove all traces of the scratches that were made in so doing, and in no case are there any signs of marks other than those producible by the rubbing of one stone on another. The design is boldly carried out, but there is no nicety of detail. On each side between the hind feet and the tail there is the beginning of a hole."

No. 25572, fig. 6, p. 52, Report 1903, is a large bird pipe made from gypsum. This pipe has been broken off just above the frontal projection, and was probably about 6 inches long when entire. The present length is $3\frac{7}{8}$ inches. Depth back to front, $1\frac{7}{8}$. Thickness from side to side, $1\frac{1}{4}$. Diameter of bowl, 11-16. Depth of bowl, $\frac{3}{4}$ inch. Diameter of stem hole, 9-16 inch. The pipe is of a dirty yellowish white color and the surface has been polished, but one side shows calcination and weathering. The eyes are well defined, being small pits about $\frac{1}{8}$ inch in diameter. The beak is well pronounced, having a prominent ridge, and the mouth is well marked. The bowl has a very small capacity for such a large pipe, and the stem hole, which is large, inclines upwards. The head projects straight up from the pipe and does not bend over in front like other bird pipes mentioned, this may be symbolical of flight. Other bird pipes are in a posture of rest or repose. The cross section of pipe is oblong with rounded corners. No wing marks or other marks on surface of pipe. Locality: Lot 10, Con. 3, Onondaga Twp., given by W. M. Dick, of Brantford, Ont.

No. 25,098, fig. 11, p. 55, Report 1903, was found at Lion's Head, Isthmus Bay, North Bruce, Ont., and comes to the Museum through Mr. W. W. Dick.

This pipe represents an owl carved from slate, the angles, edges, and corners being very precise and distinct. The bowl was made before the pipe was finished as the lower edge of the bowl orifice is very sharp, showing that the V-shaped hollow between the wings on the back (shoulders) has been made last. Below the stem hole, which is in the back, there are two flutings, dividing or defining the lower parts of the wings.

The top of the breast shows an inverted V-shaped insertion, as if showing the top of a dress or shirt; a little further down there is a transverse depression bearing 8 nicks. The feet are well defined, of 3 toes each. The cross section is square in front and round behind. The neatness and regularity of design, the appearance and the style of finish lead one to believe that it was made with metallic



No. 25,572 (a).



No. 25,572 (b).



No. 25,098. Front.

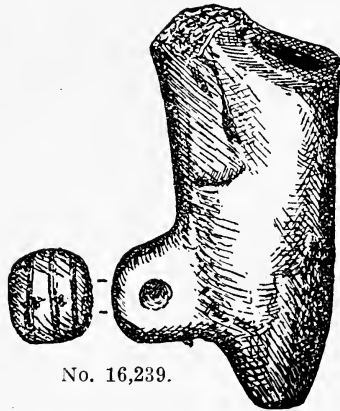


No. 25,098. Side.

tools. It is a more compact and blockier pipe than usual. The tail is defined by 4 slight nicks. There are slight protuberances for ears. The underneath part of lower mandible is well defined. The wings are well defined and are slightly raised from the remaining pipe surface, this trait being only noticed in this specimen. Dimensions as follows:

Length, $3\frac{3}{4}$ inches. Width across breast, 1 5-16 inches. Depth, back to front, 1 7-16 inches. Depth of bowl, $1\frac{1}{4}$ inches. Diameter of bowl, 9-16 inches. Diameter of stem hole, 3-16 inches.

The color for the most part is dark rich brown, but on the left side a little more than the wing is of a pale dull green. Quoting from Mr. Boyle, "The workmanship is excellent and the proportions are very good. The eye holes are bored fully an eighth of an inch in depth—deep enough to form a good seat for the insertion of any other substance to give expression as eyes to the figure, if any such intention existed in the mind of the maker. The end of the tail has either not been finished or if finished has been broken off, as it is still in the rough. In most pipes of this kind a hole is bored crossways through the feet, but sometimes perpendicularly between them. In this pipe, however, we have a compromise



No. 16,239.

hole, the boring having been done perpendicularly from below half way through the (frontal) projection that forms the feet, and another hole to meet it is bored from the left side. A little below the breast is a well-made line of serrations, the purpose of which is not very evident. The surface of pipe is not as highly polished as the surfaces of many stone pipes are, so that the scratches of the rubbing stone are still in evidence, and the word 'rubbing stone' is used advisedly, for the reason that only one stone moved over another is capable of leaving such results as are apparent on the surface of this pipe, and this is the more remarkable on account of the fact that there are those who claim pipes of such patterns to be of unmistakable European origin, directly or indirectly. Notwithstanding the generally bold artistic way in which this pipe has been worked out, there is not a single feature of it bearing witness to the use of any but primitive appliances."

No. 16,239, fig. 29, p. 21, Report 1905, is full size figure of a bird pipe from Eldon Twp. Victoria Co., that has had its head broken off. It is rather plain in appearance, not having much work done upon it. The frontal projection is perforated from side to side and has conventionalized claws marked upon the front. The data concerning this pipe has been lost, but I believe it came to the Museum through Mr. J. W. Laidlaw, now of Kirkfield P.O., Ont.



No. 27,239 (a).



No. 27,239 (b).



No. 27,239 (c).

No. 27,239, fig. 13, p. 26, Report 1906, is another headless pipe from the farm of Mr. J. J. Finney, near Burnt River P.O., Somerville Twp., Victoria Co., where it was found in 1903 by his son in a grave with three skeletons near a village site. This locality is four miles north of Rettie's station on Midland Ry.

Dimensions: Length, $3\frac{7}{8}$ inches. Thickness at shoulder, 15-16 inches. Depth, back to front, 17-16 inches. Depth of bowl, 1 inch. Diameter of bowl, 9-16 inches. Diameter of stem hole, $\frac{3}{8}$ inches. Left side has slot in wing and shallow grooves marking wing and shoulder. Right side has shallow groove half way up side, going around back above tail, connecting with groove on left side. Also has smaller slot on wing. There is a flaw on right side at end of wing.

There is a slight groove down back to stem hole. The frontal projection is rather large, of a squarish outline, is perforated through from side to side, and has three nicks across the front. At the lower part of back near base there are three slight cuts denoting tail feathers.

Where the head is broken off the broken part of the neck is ground smooth. There is a deep cut around neck immediately behind the broken part. Material dark slate.

Quoting Mr. David Boyle, p. 26, Rep. 27, who says: "It shows a somewhat ambitious attempt to make a bird-pipe, but the maker was not equal to the occasion. Even in its unfinished state it is clear that the efforts to bring it into shape were in many respects those of a bungler, and it was, perhaps, because of such treatment that the head was broken off. The fractured end has been sawn off, either by the hand that made the pipe, or by some one else equally unmechanical."

No. 27,844, figs. 10, 11, p. 25, Report 1906. This pipe represents a heron or bittern, was found near Port Perry, Lake Scugog, to south of Victoria County.

This is a very finely finished pipe but not polished. The surface shows scratches. The neck seems to be prepared for a broad band. The beak is still attached to the feet or frontal projection, which is perforated from side to side by a conical drill, and is rather large in proportion, having three cuts on each side inclining upwards representing feet. This frontal projection is divided on the lower surface or bottom by a long cut. The eyes are clearly defined; the four holes or pits on right side are evidently made with the same drill that the eyes were. The two larger shallow depressions on each side have been ground out same as the two smaller depressions on left side. This unevenness of distribution of these holes or slots is a marked feature in this class of pipe.

Dimensions: Perpendicular height, $2\frac{7}{8}$ inches. Width across breast, 11-16 inches. Distance from back to forehead, 213-16 inches. Depth of bowl, $1\frac{3}{8}$ in. Diameter of bowl, $\frac{5}{8}$. Diameter of stem hole, 7-16. Length of head and beak, $2\frac{7}{8}$. There are two notches on the tail. The pipe remains stationary if placed on base, and *vice versa*. Contour of head and beak slightly curved. Upper and lower mandibles well defined. The hole in frontal projection has been bored from each side.

Material: A brown fine grained sandstone.

Donor: Mrs. James, Port Perry, Ont.

There seems to be a tally on angle of lower jaw of nine slight notches.



No. 27,844 (a).



No. 27,844 (b).

BEAVER PIPE.*

Found by a Mr. Hewitt near Edgar, at or near site 43, Oro Twp., Simcoe Co.
Material: Mottled gray steatite.

Dimensions: Perpendicular height, 2 7-16 inches. Thickness through side to side, $\frac{7}{8}$ inch. Depth, back to front, 1 inch. Depth bowl, 1 1-16 inch. Diameter of bowl, $\frac{1}{2}$ inch, which is conically bored. The stem hole in the back has a diameter of $\frac{3}{8}$ inch, has been bored with a blunt drill and inclines upwards slightly. Slight frontal projection reaching from side to side, and is divided by two grooves to show hind feet. Front paws designated by grooves converging in across belly. Suspensory hole in short, broad, flat tail. Eyes defined by small deep holes. Mouth slightly defined; teeth and whiskers (bristles) defined by slight scratches.

The pipe is remarkable for the number of grooves and so-called tally marks upon it. Starting at the front there is one groove across the neck and one below this again, where the converging grooves begin that represent the fore feet. Then



Beaver Pipe. Oro Township (a).



Beaver Pipe. Oro Township (b).

another horizontal one below the fore feet and two vertical ones in the frontal bar; between this bar and the suspensory hole are three more parallel horizontal grooves.

There is a group of six parallel horizontal grooves across the back above the stem hole. Their ends are bounded by a slight groove on each side.

From the ends of the horizontal throat and abdominal grooves short ones incline towards each other at each side. The tail has five notches on each side. A groove extends around the hips with 18 notches on the top side.

There is one lateral slanting groove on left side from head to stem hole with 8 notches or tallies on under side. A pair of grooves on right side in a corresponding position have also similar notches, 8 in each case. Are these merely tallies, or are they significant of something else; legends, occurrences, or circumstances? And, lastly, from a small hole situate about the end of the back, a groove runs down the tail to the suspension hole and is continued around the tip of the tail.

From the apex of each pair of inclining grooves a slight cut or incision falls towards the front. The juncture of the neck with the shoulders is shown by almost worn-out incisions or cuts.

*Photo of this and following three by F. A. Hunter, Esq., Barrie.

There are three notches on the top side of the upper groove in the group of six parallel grooves on the back and four on second line. Constant use has worn this portion so much that one cannot determine how many notches there were there originally.

This pipe may be called an inscribed pipe. Would it represent the great Beaver Legend?

Of these four pipes, Mr. A. F. Hunter in letter of June 23, 1905, says they evidently belong to the Huron Indians, and can be assigned to the early period when the Hurons occupied this district (west of Lake Simcoe).

This pipe belongs to the second division of animal pipes of this class, having a horizontal frontal projection like figures 24 and 26, Report 1902; the first division having frontal bars in a vertical position in front of the pipes.

TURTLE PIPE.

This pipe was found near sites 43, and 44, Oro Twp. and represents a snapping turtle with projecting legs.



Turtle Pipe. Oro Township (a).



Turtle Pipe. Oro Township (b).

Dimensions: Length, 2 13-16 inches. Depth, back to front, 2 1/2 inches. Thickness from side to side, 1 1-16 inches. Legs are broken off and were evidently separate. No frontal bar. The abdomen is very much pronounced and rounded, and is defined from body by a longitudinal groove on each side. Tail defined by grooves with a hole bored underneath it; now broken. Anus defined. There is a groove around hind legs showing where they projected from carapace. Mouth and eyes are illy defined. There is a slot on top of head. Pipe shows much use. Being possessed of three stem holes, brings it into the class of pipe called "Composite" by some American Archaeologists; a name not adopted here yet. Depth of bowl, 1 3-10 inches, which has the appearance of being gouged out instead of being bored, having tool marks to that effect. Diameter of bowl, 11-16 inches. Diameter of large stem hole at the bottom of back, 9-16 inches; has the appearance of being made with a blunt rounded drill. Diameters of other two

stem holes, 5-16 inches each, one of which is in the right side and the other being at the top of the belly.

There are the remains of a groove separating the two front legs from each other.

Material: A black stone, probably slate.

DOUBLE-HEADED OWL PIPE.

This remarkable pipe owned by Dr. D. Evans of Innisfil Twp., Simcoe Co., was found in that locality. Dimensions: Length from tip of tail to horizontal line across tops of ears, 4 5-16 inches. Width across faces to outside edges, 3 inches. Thickness through back to front, 1 7-16 inches. Width across breast, $1\frac{7}{8}$ inches. Depth of bowl, 1 11-16 inches. Diameter of bowl, 13-16 inches. Diameter stem hole, 11-16 inches.



Double-headed Owl Pipe. Innisfil Township (a).

Double headed Owl Pipe. Innisfil Township (b).

Material: Polished black steatite, evidently stained. This massive pipe has a plain unornamented surface; represents the horned owl. There are three deep cuts or grooves on top of each head. All the eyes are large and shallow. The beaks are not prominent. The left head is facing more to the left side than the front. The right head faces directly to the front. There is $\frac{1}{2}$ inch space between heads. The grooves on the heads make quite distinct ears, giving an appearance to some aboriginal clay pipes.

The large frontal projection has a horizontal hole through from side to side

with a diameter of $\frac{1}{4}$ inch. There is no suspensory hole. The bowl has been bored with a tapering or conical drill and has gouge marks at top. The stem hole is in the back and is quite large, and has been bored with a blunt, wide drill leaving the hole with a rounded bottom. The pipe evidently has been much in use. Weight, $9\frac{1}{2}$ oz. avoirdupois.

Mr. Hunter in remarking upon this pipe in letter of June 23rd, 1905, remarks, that "It is worth remembering that there was no owl clan amongst the Indians," and also "does the double head on a single body represent a freak of nature or an imaginary bird?"

UNFINISHED BIRD PIPE.

Found on Huron site, east, $\frac{1}{2}$ Lot 6, Con. 3, Twp. of Vespra, Simcoe Co., by Ed. H. Williams, Jr. Dimensions: Perpendicular height, 4 11-16 inches. Depth, back to front, $1\frac{3}{4}$ inches. Thickness from side to side, $1\frac{1}{8}$ inch. Material: common grey slate, or shale. Shows pecking and rubbing mostly with but slight traces of sawing. Weight, $8\frac{1}{2}$ oz. avoirdupois. The diagnostic features not being



Unfinished Bird Pipe. Vespra Township.

clearly enough defined or finished enough to determine species, though it is perhaps meant for a crow or some heavy billed smaller bird.

Frontal projection very prominent. The bowl hole has been bored to a depth of nearly $\frac{1}{2}$ inch. No stem hole. This is a good illustrative specimen.

No. 30,972, p. 62, Report 1911, is a well finished symmetrical pipe, representing an eagle or other bird of prey. The eyes are very large and the cavities bored through. The beak is well pronounced and defined by cuts at sides and top. Mouth well marked. Lower mandible is divided longitudinally by a cut underneath. There are no other diagnostic features denoted. Surface is well polished and smooth. There are a number of fine criss-cross scratches all over surface evidently representing plumage. Cross section of body oblong. Bowl shows upper part made with a broad drill and lower part made with a more slender drill. The stem hole is near base of pipe and inclines upwards. A

suspensory hole has been drilled in from base of pipe, meeting another drilled in at an angle from bottom of front. All the drilling (eyes, bowl, stem hole and suspensory hole) has been done by aboriginal methods as evidenced by the drill marks. In fact the whole pipe shows no sign of any other than aboriginal methods.

There is no frontal projection. The breast slants away to tail. The top of the head has been flattened after the eye cavities were made. The surface has been polished after criss-cross scratches were made, some of them being rubbed out in places.

Dimensions: Perpendicular height, $3\frac{1}{8}$ inches. Distance from back to front, $1\frac{3}{8}$ inches. Thickness of back, 15-16 inches. Thickness of front, $\frac{7}{8}$ inches. Depth of bowl, 15-16 inches. Diameter of bowl, $\frac{3}{4}$ inches. Diameter of stem



No. 30,972.

hole, 7-16 inches. Diameter of eye cavities, $\frac{3}{8}$ inch, and of suspensory holes, $\frac{1}{4}$ and 3-16 inches. Material: A clay slate. Locality: Vaughan Twp., York Co., Donor: Dr. R. B. Orr.

No. 30,875, p. 63, Report 1911, is a very interesting and unique specimen, being a "made over" human figure pipe, with conventionalized arms and legs. The original posture was in the usual squatting position with arms resting on top of knees. After the pipe was broken through the bowl, or the bowl broken off as the case might be, the broken part was then ground smooth right down to base of pipe, showing remainder of bowl and the juncture of the stem hole and bowl. The secondary bowl, which is rather broad and shallow, was bored in front of the figure, through the upper part of the bent legs into the body and a secondary stem hole being bored to meet it at right angles from the base. The position of the pipe now for smoking would be on its back with base towards the smoker. The original position would have its back towards the smoker, head upright, facing outwards.

The legs on each side are marked by two deep cuts, dividing the thigh from the body and the calf from the thigh. The tops of the knees are separated in a like manner from the arms. The left hand and fingers are depicted by several notches. The face is pretty well defined and is circular; eyes are small pits made by a drill. The mouth is a small nick. Nose a mere lump with faint nostrils. Chin well defined. No ears are shown or marks for hair.

The front of the pipe has also been cut away a bit. The legs, I think, were originally separated in front and a suspension hole was bored upwards from the base between the feet. The feet and toes, if ever designated, have been removed by the secondary working. Surface polished. The long cuts were formed by grinding. The neck is rather thick. All workmanship shows aboriginal methods.

Dimensions: Perpendicular height, $2\frac{1}{2}$ inches. Thickness at shoulders, 1 inch. It is now probably about $\frac{2}{3}$ original size.



No. 30,875.



Probable original form of No. 30,875.

Material: Drab clay slate.

Locality: Vaughan Twp., York Co.

Donor: Dr. R. B. Orr.

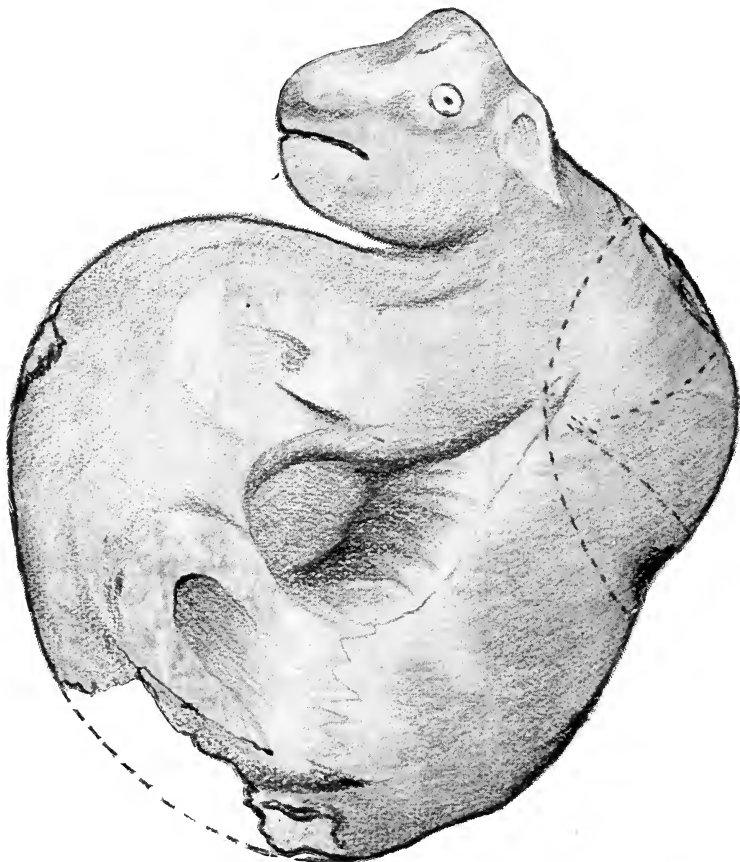
The crouching or squatting position of the human body with arms crossed above knees has also been observed in small Mexican stone figures, two of which resembling fig. 41, report 1902, are illustrated in Bulletin 28, Bureau of American Ethnology, p. 350.

There is a panther pipe from Fort Erie, Ont., mentioned on p. 351, vol. 9, No. 3, Bulletin Buffalo Society of Natural Science, obtained by Dr. A. L. Benedict. This pipe is illustrated on a plate facing p. 214. Truman C. White's History of Erie Co., N.Y., vol. 1, with following information "a beautiful totem of impure gypsum comes from Fort Erie. The animal represented is probably a panther, the long tail being curved forward and the claws showing in bas relief. Large conical perforations from the neck and the lower part of the back of the figure meet at a common apex. Possibly these openings were intended one for

tobacco and the other for the introduction of a stem." See letter of W. L. Bryant, Custodian of Museum, Buff. Soc. Nat. Sci., Aug. 23, 1913.

This pipe is a surface find and is now in above museum.

Dr. A. L. Benedict, of Buffalo, in a letter of Jan. 2, 1914, remarks as follows: "The relic referred to was bought at Fort Erie about 30 years ago. The stone is an impure gypsum, colored brownish, probably from smoke and dirt. The image represents a panther or some other animal with long tail, the claws being in relief, the back being curved and the head and tail meeting. In the back are two conic



Fort Erie, Ont. Panther Pipe. Buffalo Society Natural Science.

holes about 2. c.m. in diameter at the outside, meeting in a hole about $\frac{1}{2}$ c.m. in diameter at the apexes. My impression that the object was a token or ornament and not a pipe, as the holes are not well adapted to receive a stem, although it is possible that the object may have been used as a pipe also."

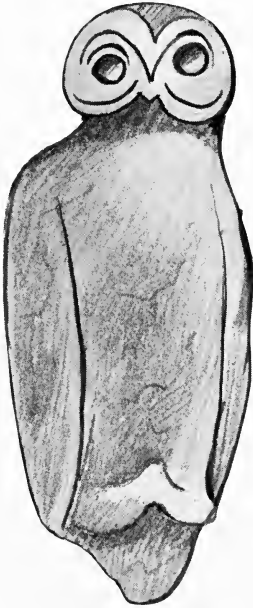
Perhaps this pipe is an unfinished one.

SOME UNITED STATES SPECIMENS.

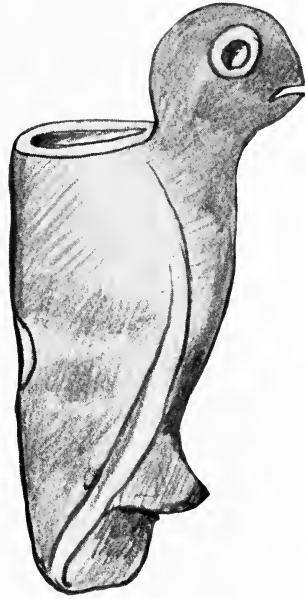
We are indebted to Dr. W. M. Beauchamp, of Syracuse, N.Y., for the outlines and notes on the following eight specimens, seven from New York State and one from Ohio. See letters of April 1st and March 23rd, 1908. Also to Mr. A. C. Parker, State Archæologist, Albany, N.Y., for outlines, etc., of the Ripley Animal

pipe and Mr. C. C. Willoughby of Peabody Museum for notes and outlines of the Silverheels Owl pipe, N.Y., and to Messrs. G. A. West, author of *Aboriginal Pipes of Wisconsin*, and S. A. Barrett, curator Public Museum, Milwaukee, for cut and data of Wisconsin bird pipe.

These outlines are of natural size.



No. 1 (a). Ontario County, N.Y.



No. 1 (b). Ontario County, N.Y.

No. 1 Owl pipe from Ontario Co., N.Y. Material: Grey slate.

No. 2. From Starkey, N.Y., near Seneca Lake. Material: Fine yellowish olive slate pipe representing a hawk or eagle. Fine polish. Claws in front and tail feathers behind. Hole behind (stem hole) elliptic with faint radiations. No perforations. May be unfinished.



No. 2. Starkey, N.Y.



No. 3. Squakie Hill, N.Y.

No. 3. Olive grey slate Owl pipe, from Squakie Hill, near Mt. Morris, N.Y. This site has both early and recent articles and also Mound Builder graves.

This pipe has a construction of owl and human features in profile.

No. 4. Flying Squirrel pipe, Jefferson Co., N.Y., of grey marble.

Owner, Col. Camp, of Sackett's Harbour, N.Y. This is a large and remarkable pipe of light greenish grey stone, very highly polished. The stem hole is in



No. 4. (a) Jefferson County, N.Y.

the tail, making the long diameter vertical (on end). On the breast is a conventional human face, two eyes and a mouth. The bowl central, above (letter Ap. 1, 1908).

"The circles are nearly exact in this pipe. It is observable that the face is turned from the smoker." Same letter.

No. 5. Striped slate, Jefferson Co., N.Y., owned by Col. Camp, of Sackett's Harbour, N.Y.



No. 4. (b) Jefferson County, N.Y.



No. 5. Jefferson County, N.Y.

RAVEN PIPE

No. 6. Owned by Mr. W. A. Hakes, Binghamton, N.Y., found just south of Pennsylvania line. Green striped slate; reverse a little different. This is a remarkable pipe. The reverse side varies in its decoration. The absence of the spur (frontal projection) and the consequent change in the perforation are easily seen. At present it is in the Public Library at Binghamton (letter of 23 March, 1908, W. M. Beauchamp).

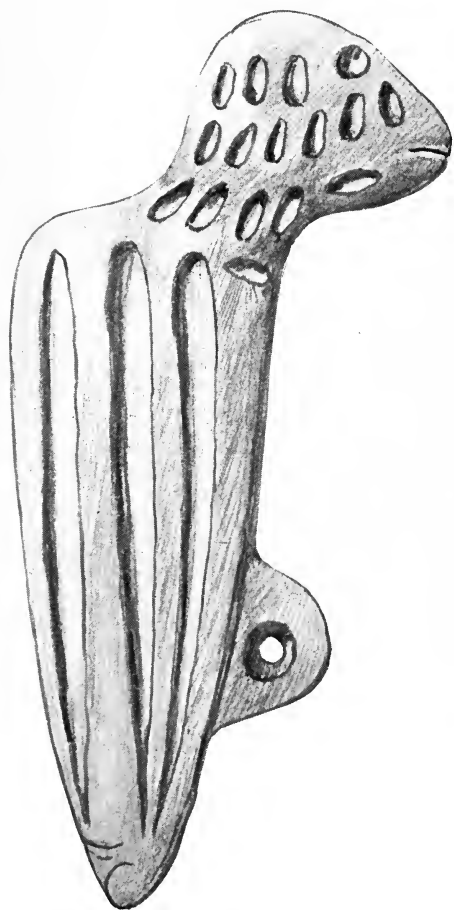


No. 6. Binghamton, N.Y.

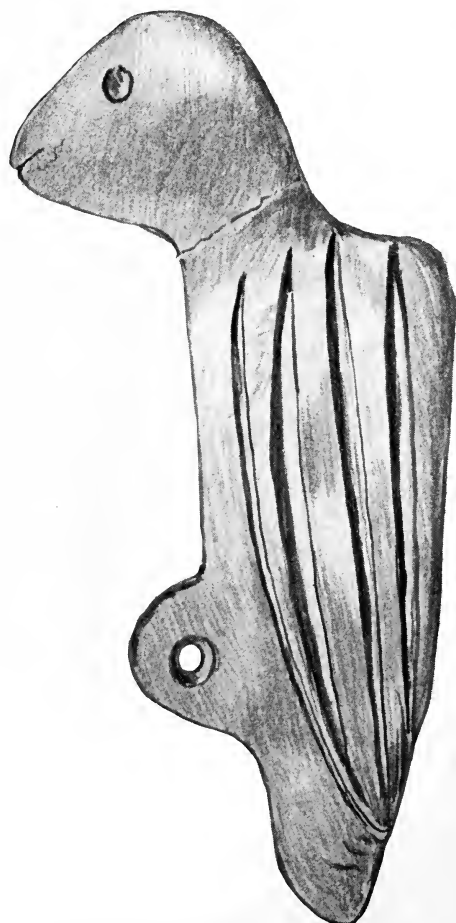
No. 7. From Cayuga Lake. Evidently of Huron slate being green on right side and purple on left side.

No. 8. Panther pipe from Ohio; is now in the Smithsonian Institute. Material: Light drab slate.

The head of this pipe resembles somewhat a lizard's head, and does not appear to me as a distinctly marked panther's head.



No. 7 (a) Cayuga Lake, N.Y.



No. 7 (b) Cayuga Lake, N.Y.



No 8 (a) Side view. Ohio.

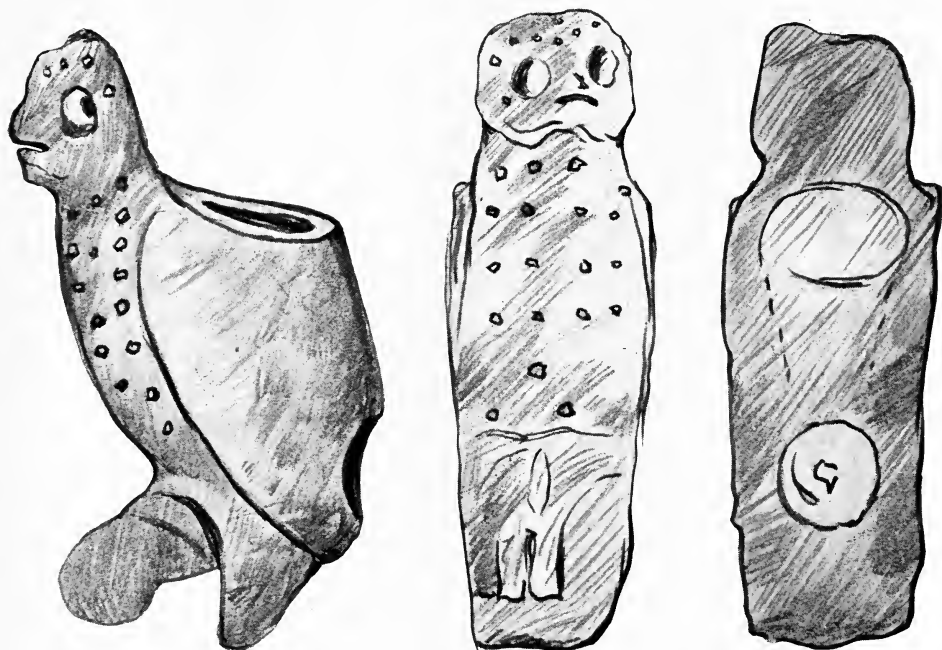


No. 8 (b) Back view. Ohio.

SILVERHEELS OWL PIPE.

Now in the Peabody Museum of Archæology, Harvard University, Cambridge, Mass. The figures are of natural size. Length, $3\frac{3}{8}$ inches. Depth, back to front, $1\frac{1}{2}$ inches. Width across breast, $1\frac{1}{8}$ inch.

Material: Yellow limestone. Found in grave 30. Silverheels site, Brant, Erie Co., N.Y., by Messrs. M. R. Harrington and A. C. Parker, who conducted this exploration in 1903 for the Peabody Museum. The site produced quantities of European artifacts and metals, and is supposed to be Erian, existing about 1st half of 17th century, as the Eries were expelled from their territories in 1654.



Silverheels Owl Pipe.
Side

Silverheels Owl Pipe.
Front.

Silverheels Owl Pipe.
Back.

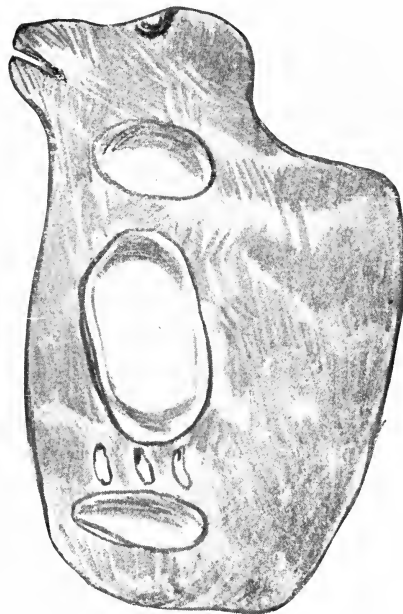
See p. 531 N.Y. State Museum Bulletin on Excavations at Ripley, N.Y. Though Mr. Parker says elsewhere, p. 57, N.Y. State Museum Bulletin, No. 132, that all the pottery from Silverheels site is Senecan and not Erian.

Mr. Willoughby, head of Peabody Museum, states that there is no indication of white man's influence in the manufacture of this pipe, and also the dots on breast and head represent small holes or pits $1\text{--}16$ to $\frac{1}{8}$ inch in depth. A cross section of eye shows that 2 drills of different sizes may have been used. The feet are not well defined, the left foot being split off and afterwards polished down. The right foot shows two characteristic claws above and below but the tips are not clear.

The perforation in the frontal projection is from top to bottom. There seems to be no fixed rule about these perforations.

The site is situated about $\frac{1}{2}$ a mile from High Banks up the Cattaraugus River.

Figure 14, p. 503, N.Y. State Museum Bulletin, on excavations at Ripley, N.Y., shows an animal pipe from Grave XLVII., Pit 92, associated with a pot of typical Erian form. A Seneca Indian pronounced it a representation of a mythical monster, known to the Iroquois as "Niagwahe." This statement of the Indian is to be taken *cum grano salis*. The pipe is just an ordinary animal pipe



Ripley Animal Pipe.

of plain style, with the diagnostic features not plainly enough shown to determine what particular animal the pipe represents. The site is classed as Erian, and showed traces of contact with Europeans and the time of occupation estimated about the beginning of the 17th century. This pipe was found on Lot 27, Ripley, Chautauqua Co., N.Y., August, 1906, by A. C. Parker, State Archæologist. Dimensions: Length $3\frac{1}{8}$ inches, back to front 2 inches, distance between eyes $\frac{1}{8}$ inch. There seems to be some doubt as to what material it is made from. Mr. A. C.



Ripley Animal Pipe.
Face.

Parker, p. 536, says its "color is bluish white and it appears to be some species of talc or steatite." Mr. D. H. Newland, Assistant State Geologist, pronounces the material Ohio kaolin. It may be burnt or calcined steatite. There are three marks or cuts on each hind leg. The bowl and stem holes have been drilled and gouged

out. There is nothing in the workmanship to indicate the use of European tools or influence. The tail is produced into a frontal bar reaching the chin. The eyes and mouth are well marked. There are three holes, the middle one being the largest and is between the front and hind legs. The other two are respectively between the head and fore legs, and between the hind legs and tail. Other features are not marked.



Bird Pipe. Fig. 103, Bull. Polished Stone, N.Y. Oneida River, N.Y.

Figure 103, Bulletin on Polished Stone Articles, N.Y., by Rev. Wm. M. Beauchamp, is a bird pipe of dark green slate, $7\frac{1}{2}$ inches high, from Oneida River, N.Y. Quoting from the Bulletin, is "Moderately thick with a perforated projection in front to which ornaments may have been attached. It has wings, feathers, cock's comb, an engraved collar or necklace, as well as a thick, open bill. The form and work are modern." This pipe resembles a woodpecker with its straight beak and crest, and not a farm fowl, is my opinion.

Figure 117, same Bulletin, is another bird pipe similar to Figure 103, a rare form "it seems to have been made by the same hand, and was found on the Seneca River, N.Y. The same style of work appears in some Ohio pipes and in one figured by Dr. Rau from N.Y. This pipe is of green slate and not thick, and has a perforated projection in front as well as lines and grooves for feathers." The pipe is $3\frac{3}{4}$ inches high, and somewhat resembles a partridge, grouse, or quail.

Figure 83, p. 107, *Aboriginal Pipes of Wisconsin*, by Geo. A. West, was found in 1854 in Dodge Co., by Mrs. Wilhelmina Hafemeister. Material black slate, height 4 inches, has perforated frontal projection carved to represent claws. It is quoted as an exotic form and work is modern of New York type. Illustration shows wings raised from body, serrated crest or comb, and a straight bill. Probably represents a woodpecker.



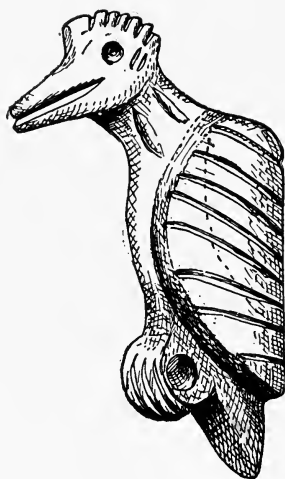
Bird Pipe. Seneca River, N.Y. Fig. 117.
Bull. Polished Stone, N.Y.

Mr. Beauchamp, in reference to the eight outlines furnished by him, thinks "all these were made with European tools. The boring for the stem holes is too sharply defined at the surface for primitive methods, and there are other reasons. Perhaps the finest bird pipe I have ever seen not only has this sharp boring, but the crest seems a veritable cock's comb. It might be called a woodpecker and of course is conventional, but suggests a barnyard fowl. . . . I am inclined to think them of Indian make, but feel certain that metallic tools were used. It may be difficult to give a date." (See letter April 1st, 1908.)

"The elliptic grooves are a frequent feature of this style." (Same letter.)

The views expressed by Mr. Beauchamp in his opening chapter on polished stone, etc., anent the age of polished stone articles in New York State, may not exactly fit here on account of the reason of the expulsion of the Hurons and Neu-

trals by the Iroquois and the subsequent occupation by later Algonquins of their territory, makes it a bit difficult to assign these pipes to any particular tribe or people, especially as most of the pipes are surface finds. Without examining the various specimens, one cannot very well pass judgment on the excellence of finish, which is shown in cuts and sketches, especially of those outside the Province, so one cannot say on which side of the Lakes the finer specimens are found, but judging from what we have seen, and have seen described, equally good specimens seem to come from both sides. Though the unfinished and rougher specimens from New York State, etc., are not described minutely, they are just noted. This is wrong, for the purpose of science and record each specimen has its own individual value, and whether rough or fine, finished or unfinished, the individual peculiarities of each specimen should be noted for reference. These facts should be strongly impressed on students and others beginning collections of Indian relics. The figures and descriptions in this article are as accurate as possible, with the exception probably of No. 1, owl pipe from Ontario Co., N.Y.



Wisconsin Bird Pipe.

The materials chiefly used are various kinds of slate—especially Huronian, and steatite or soapstone, odd specimens are of limestone, sandstone, gypsum and marble. It is worthy of notice that no specimens of this type made of catlinite have turned up, to the writer's knowledge. This fact would lead one to deduce that this particular type in question was in vogue before the introduction of catlinite to the Lower Lake regions by the Iroquois on the return of their war parties from the west, a period which Dr. Beauchamp places about 200 years ago. Neither has the writer come in contact with any pipes of this type made from Nottawasaga sandstone, which is dark red in color, though he has seen other local pipe forms of both these materials.

Rough and fine specimens. Query? Which are the older! Were the finer specimens made first with metallic tools, or even by the white man for the purposes of trade, like other pipes and wampum, and were the rougher specimens imitations of these finer forms, made by Indians with incompetent tools, or *vice versa*? Or, are the finer specimens legitimate descendants of the rougher and more primitive forms, made after the Indian had access to metallic tools? These

forms of effigy pipes are not duplicated in clay, if we may except clay turtle pipe, Figure 149, N.Y. Bulletin on Earthenware.

The writer thinks that it can be safely assumed that this type of pipe sculpture is indigenous to the Huron Iroquois region. The beauty of coloring of some of the pipes must not be lost sight of, and some specimens have as much attractiveness in their coloring as in their lines.

Mr. A. F. Hunter, in letter, 23rd June, 1908, remarks that: "It is remarkable what a large percentage of these effigy pipes are in an unfinished condition, or have holes twice attempted, or some other incomplete feature," and that "he cannot account for this circumstance."

The sharply defined boring at the stemholes mentioned by Dr. Beauchamp in his letter, April 1st, 1908 (J[]) does not always obtain here by a large percentage. In a number of cases the orifices of the stemholes and bowlholes show plainly the boring by non-metallic tools, leaving very indistinct edges such as)(this shape.

In a letter of Jan. 15th, 1914, Mr. A. C. Parker, Curator of Archaeology, State Museum, Albany, N.Y., remarks: "In making a study of Iroquois implements after ten years or more of actual field experience in excavating (not surface collecting) I am impressed with the differences that exist between Iroquois articles made from stone and those modelled from clay. I refer especially to pipes. I have found several pipes of the form which has interested you especially, that is the lizard or animal effigy, and the stone pipes of the owl type, wherein the bowl opening is at the shoulders of the effigy and runs down into the body. I have found these types of pipes side by side with Iroquois clay specimens, and have come to the conclusion (however, not a final one) that these represent the earlier form of stone art, and that these pipes were kept either as ceremonial objects or as heirlooms not being as easily broken as the clay objects. naturally the means for preserving them was greater."

The writer would be pleased to receive any further notes, outlines, or photos of similar pipes for future record.

ADDENDA.

Mr. A. F. Hunter in a letter of Dec. 2nd, 1903, mentions a stone bear pipe, found near Roaches Point, Lake Simcoe. The bowl was in the back, and stem hole in anus. The figure was standing on its four feet. This is a variation of type of pipe under discussion, and would more resemble the Mound Builders style. This pipe can not now be located.

Mr. Hunter also in another letter of 17th Jan., 1905, mentions an effigy Pipe owned in Sebright, Ont. Subsequent inquiry informs us that this is a horned Owl pipe of dark stone, found some years ago, on Lake Simcoe shore, probably between Orillia and Beaverton. Reported to be a very good pipe, but no outline has been obtained yet.

Mr. A. F. Hunter in a letter of May 25th, 1903, in reply to a query *re* an animal pipe found on site 32, Twp. Oro, Co. Simcoe, (see page 175, Report for 1902), and also a letter from Mr. T. M. Hipwell owner of the lot, which is east half of 1 in Con. 13, beside Bass Lake, give us the information that this pipe with others were associated with other relics, amongst which were iron Tomahawks bearing the French stamp. This pipe was of black stone carved to represent a mole, and was given away, eventually going to California but cannot now be located.

NEW MATERIAL.

The present Archaeological Report for the year 1913, it will be noticed, deals largely with the Neutral or Attiwandaron tribe, and illustrates a number of specimens obtained from the territory once occupied by this numerous nation. The southwestern portion of the Province of Ontario was, when thrown open for settlement, a huge cemetery where lay, buried for centuries in different localities, large deposits of stone articles manufactured by these vanished people. It is well to remember, however, that after the ruin and flight of the Neutrals, their abandoned grounds were overrun by Iroquois scouting and hunting parties, by Algonquin rovers, and by French and United States trappers and traders; for from end to end of the district there are found traces of Iroquois and Algonquin tribes and evidences of European contact. In some places, commercial beads used for ornament and of European manufacture have been found, indicating that French traders had visited Neutral territory some years before the destruction of the tribe. The pottery pipes, flint arrow-heads, and stone and bone articles used in their religious rites, while resembling the same productions of western and northern tribes, show an artistic design and finish much superior to similar articles produced by their neighbors. In repairing and fitting flint arrow tips, shaft heads and fishing spears, the Attiwandarons had no superiors in any part of the American continent. Their territory has now been so thoroughly exploited and spaded that we do not expect it will yield in the future anything new or differing from the articles now in our possession. Our provincial museum possesses the finest collection in existence of the wonderful artifacts of this once great and numerous Indian nation. This collection cannot be duplicated; for the mine is practically exhausted and nothing new or unfamiliar remains to be discovered by a future explorer. More than this, our Report unfolds all that is known of this vanished race: we have consulted all the acknowledged sources of information, and with our article appearing in this issue, the last word of this forgotten tribe is practically spoken.



Fig. 33,620.



Fig. 33,619.



Fig. 33,621.

These pieces of Attiwandaron pottery (Nos. 33620-33619-33621) are similar to the pottery found in the various sites of Hurons, Iroquois, and Algonquins. Whole pottery is extremely rare; our knowledge of Attiwandaron pottery is, therefore, largely derived from fragments which are fairly abundant in many sections. The tempering material was commonly crushed shell or crushed stone, often very coarse, the same as used by all the northern tribes: the Moundbuilders, and some others made it of much finer material: probably exercising more care in the manufacture.

"It is hardly possible to find within the whole range of products of human handicraft a more attractive field of investigation than that offered by aboriginal American ceramics, and probably no one that affords such excellent opportunities for the study of early stages in the evolution of art and especially of the esthetic in art. The early ware of Mediterranean countries has a wider interest in many ways, but it does not cover the same ground. It represents mainly the stages of culture rising above the level of the wheel, of pictorial art, and of writing, while American pottery is entirely below this level, and thus illustrates the substratum out of which the higher phases spring. But it should be noted that not merely the beginnings of the story are represented in the native work. The culture range covered is quite wide, and opportunities of tracing progress upward to the very range of civilization are afforded. Between the groups of products belonging to the inferior tribes scattered over the continent from Point Barrow to Terra del Fuego, and those representing the advanced cultures of Central America and Peru, there is a long vista of progress. Near the upper limit of achievement is the pottery of Mexico, comprising a wonderful cluster of well-marked groups. Some of the highest examples of ceramic art are found in or near the valley of Mexico, and a number of striking vases of this region, preserved in the Mexican National Museum, may be regarded as masterpieces of American fictile art. Central and South America furnish a series of superb groups of earthenware, among which are those of Guatemala, Nicaragua, Costa Rica, Chiriqui, Colombia, Bolivia, Peru, Brazil, and Argentina, each disputing with Mexico the palm of merit. Following these in order are various groups of ware whose remains are assembled about the margins of the greater culture centers or distributed widely over remoter districts. The work of the Pueblo tribes in Arizona and New Mexico, all things considered, stands first within the area of the United States: closely approaching this, however, is the attractive ware of the Mississippi valley and the Gulf Coast. Below this and at the base of the series is the simple pottery of the hunter tribes of the North.

"Numerous tribes have continued to practise the art down to the present time, some employing their original methods and producing results but little modified by the lapse of centuries, while others, coming more directly under the influence of the whites, have modified their work so that it no longer has any particular value to the ethnologist devoted to aboriginal studies. The Pueblo country furnishes the best example of survival of old methods and old ideals. Here numerous tribes are found practising the art successfully, producing vases and other articles quite equal in many respects to the ancient product. The study of the present practices is highly instructive, and the archaeologist may begin his study of the ancient pottery of America with a pretty definite knowledge of the technical and functional status of the art, as well as a clear conception of the manner in which it embodies the symbolic and esthetic notions of a people." —(Bureau of Amer. Eth. 1898-9).

GORGETS—PENDANTS—PIERCED TABLETS.

These artifacts are supposed to have been used for ornamental purposes, suspended from the neck or some other part of the body. Usually the stone was selected on account of its fine veining, and when polished must have looked very well. In very few of these pieces do we find any evidence of wear in the holes which are most uniformly done; being bored from both sides in the same way as the bird-stones, pipes and other stone artifacts. There is an almost unlimited variety of these stones, with the holes in every conceivable place, some with one, others with two, three and four perforations.

The following pieces were mostly found in the counties of Oxford, Middlesex and Waterloo. Some carry an appearance of great age, and others are almost as fresh as the day they were made. One is led to wonder that the weather with all its changes has not exercised a more injurious effect upon them. The large majority of these pieces are surface finds.

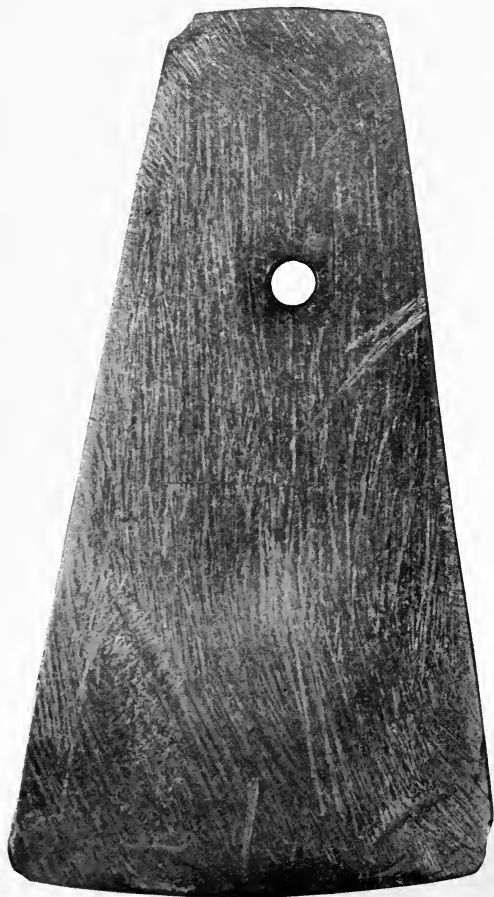


Fig. No. 32,885.

Figure 32885, a gorget from the L. D. Brown collection, was found in the Township of Nissouri. It is made of beautiful striped slate, square on the sides. The hole is slightly to one side and shows some slight evidences of wear. In thickness it exceeds most of the artifacts of this kind.

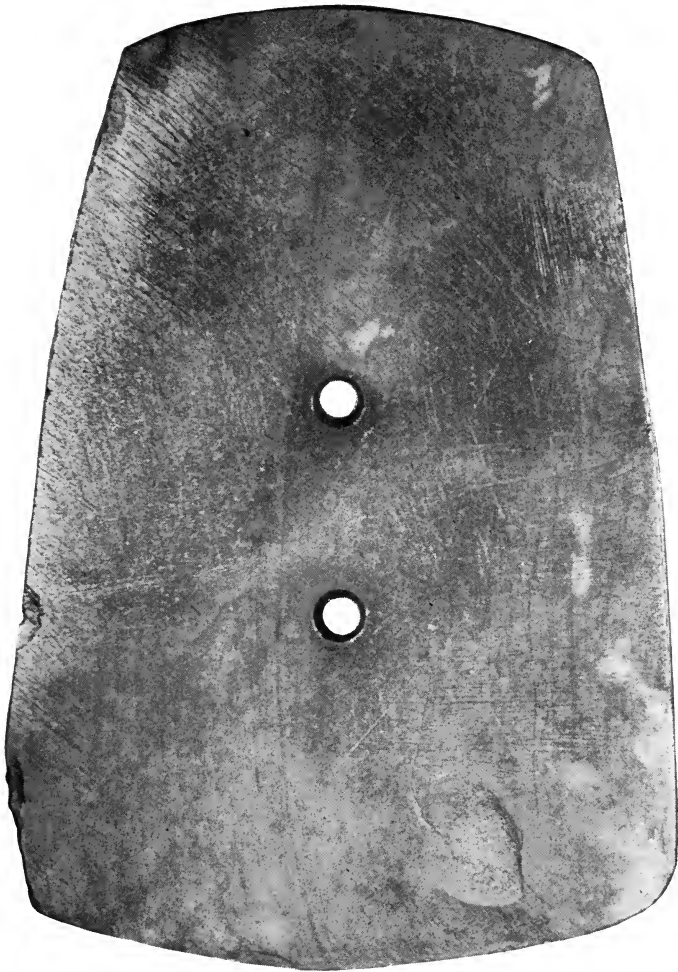


Fig. No. 32,874.

Figure 32874, found in the County of Oxford, is a large gorget which might very well have been used as a breastplate. It is made from gray mottled slate, and is very much thinner than usual with gorgets of this size. The holes are larger and closer together. It is elegantly made and almost absolutely uniform in outline. Like all pieces of this kind the outline is so perfect that it would suggest to us that the makers had a knowledge of geometrical proportions, not usually supposed to be possessed by northern tribes.



Fig. No. 32,873.

Figure No. 32873 is a gorget or pendant, found in the Township of Nissouri. The material is banded slate; there is but one hole, which is much larger than in most specimens, but bored as in the others, from both sides. While the hole is slightly removed from the centre yet the general outlines are almost perfect.



Fig. No. 32,870.

Figure No. 32870 is a banded slate gorget from the L. D. Brown Collection, and was found in the Township of Blanshard. This oval-shaped stone, perforated at both ends, is somewhat rare, and is thinner than most of these stones. The edges are slightly chipped; but this is probably due to exposure after it left the hands of the aboriginal owner.



Fig. No. 32,877.

This gorget, No. 32877, in the L. D. Brown Collection, is a surface find from the Township of Zorra. The double borings are orthodox, and while this piece is slightly smaller at one end than the other, the sides are uniformly made. It is chipped and striated just as if it had been through a glacial period, and without doubt has the appearance of great age. There can be no doubt that many of these pieces have been handed down from generation to generation. The original makers are unknown, not only to us, but probably to the Attiwandarons themselves.



Fig. No. 33,738.

This pick-shaped object, No. 33738, was found in the County of Oxford, and is the gift of W. G. Smith, Esq. Like banner stones, crescents, and others, its uses are but a matter of conjecture. I have seen a piece almost identical with it in the magnificent collection of the Very Rev. James Savage, Detroit, Mich. These relics, known as picks, vary considerably in size. Not all are perforated. This is a good sample and is made from beautifully stripped slate, properly perforated, the hole being slightly smaller on one side than the other, and from general appearances bears evidence of having been used.



Fig. No. 32,843.

This Bird Amulet, No. 32843, in the L. D. Brown Collection, was a surface find in the Township of Blanshard. The majority of these bird stones are surface finds. This one is of striped slate with prominently projecting eyes, round and button shaped on an elongated stem. It has a flanged tail; the holes are made, as usual, on the base, as may be seen at the front of the artifact.



Fig. No. 32,895.

Figure No. 32895 is a chisel found in the County of Oxford. It is made out of very fine hard slate. The cutting end at one time has been very sharp, but is now somewhat chipped. The smaller end has the appearance of having been used with probably a mallet or wooden hammer. There are not many similar pieces in the Museum. It is probable that these were primarily intended for woodworking. Chisels of this kind were extensively used among the wood-working tribes of the North-West. It is also well known that chisels of this kind

were frequently used in the skinning of animals. With a hunter, the operation of skinning is often done in haste, and when there is very much hurry, yet the fear of cutting the skin, induces the flayer rather to infringe upon the carcass than endanger the value of the hide.

In the hunter state of society, it is the duty of the women to prepare and dress the skins of animals taken in the chase. For this purpose, the skins are stretched in the green state on a frame, and the flesh and integuments are cleanly removed. This was done in the early times by means of an instrument of stone, which has often been mistaken for a small axe. It is a species of hand chisel, such as this, that may not cut the skin, and yet of sufficient edge and hardness to permit a stout jerking blow. It was grasped firmly by the top. It was often very rude, and was merely nothing but an elongated stone, small and brought to an edge.

By this means, the skins of the deer and other animals were completely stripped of the adhering flesh, prior to the process of curing, braining, smoking, or such other processes as were necessary to fit them for the various uses to which they might be devoted.



Fig. No. 32,899.

Figure 32899 was probably used for ceremonial or religious purposes. As is well known, the religion of a people is always of the greatest importance, since it is the expression of the theory formed by that people, of man's position relating to the rest of the seen and unseen world, and forms the basis of a very large part of their Ethnography. This being so we must look upon all artifacts such as this with an eye to study the undermost thoughts of the ancient Atti-wandarons.

This unique stone was a surface find in the County of Elgin, near Lake Erie. We have no similar specimen in the Provincial Museum, nor have I at any time seen anything like it. The boring in this is similar to the boring in the bird amulets, and is very neatly done. The groove at the top is very smooth and has the appearance of being rubbed, probably by hafting; and when in use was decorated as only the Indians knew how to do; and was used in either their ceremonial or war dances.



Figure 32844 is a beautiful Banner Stone, found in the Township of Blainhard. It is made of dark green striped slate. The ends come to a rounded point. The usual perforation in the centre is bored in the orthodox way. On the side shown in the photo-engraving there is an elevated bridge extending across the stone; the other side is smooth and rounded. The orifice is $\frac{5}{8}$ of an inch on the convex side and 9-16 of an inch on the concave side. Stones of this kind show an amount of skill in their manufacture that is truly wonderful. The proportions are almost as perfect as if made by machinery.

FLINTS, No. 33923-33933.

These flints were found in a cache by Adam Becker, Esq., on Lot 25, Concession 15, near Cassel, N.R. Oxford. They were all lying together just as they had been placed hundreds of years previous. They are undoubtedly flint knives and would answer the purpose almost as well as steel. They form a part of the Brown Collection. These cache deposits of flint occur occasionally in Canada, but are very common in the mound building regions of the Mississippi and generally through the Atlantic States. The largest deposit recorded contained upwards of 8,000 flint disks (Moorehead). Few exceed 5,000 while those containing a smaller number are very numerous.

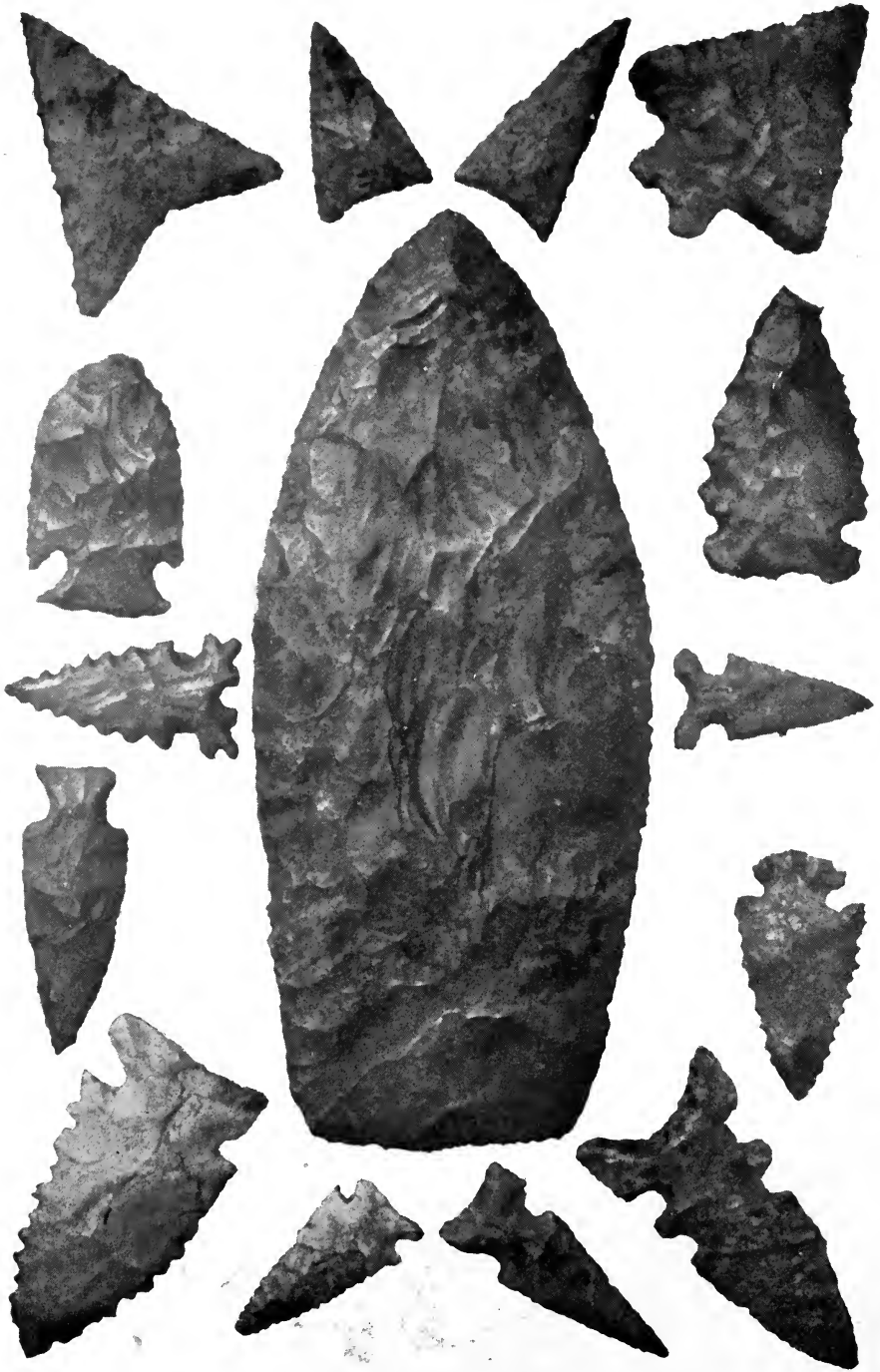
Perhaps none of the products of aboriginal art are better known than those which may be grouped under this head and which are referred to as knives, drills, scrapers, and projectile points. Their employment must have been general, as their dissemination is almost universal. Their number is beyond estimate. Their most important characteristic is their general shape, nearly all being referable to origin through the leaf-shaped blade. Fill out the outline of almost any specimen, large or small, and the blade form is restored.

"It is the common practice to speak of spearheads and arrowpoints as if they belong to well-distinguished classes, but the line can not be drawn between them with any degree of clearness. The larger forms were, in general, doubtless used as spearheads, and the smaller for arrowpoints; yet it is probable that a large percentage of specimens of medium size were used in either way as occasion required. These implements were also equally serviceable for other purposes, and many of them may have been hafted and used for cutting, scraping, or digging. The slender-shafted hand perforator or drill, evidently adapted to boring stone, wood, bone, and the like, and in numerous cases bearing evidence of use, may also have served at times as a projectile point. The line separating these classes of objects into functional groups is therefore somewhat arbitrary, although convenient for descriptive purposes.

"On the whole, it seems most probable that many of the simpler weapons, implements, etc., have been invented independently by various savage tribes. Though they are remarkably similar, they are at the same time curiously different. The necessities of life are simple and similar all over the world. The materials with which men have to deal are also very much alike: wood, bone, and to a certain extent stone, have everywhere the same properties. The obsidian flakes of the Aztecs resemble the flint flakes of our ancestors, not so much because the ancient Briton resembled the Aztec as because the fracture of flint is like that of obsidian. So also the pointed bones used as awls are necessarily similar all over the world. Similarity exists, in fact, rather in the raw material than in the manufactured article, and some even of the simplest implements of stone are very different among different races."—(Smithsonian Inst. Bul. 15.)



Fig. Nos. 33,923-33,933.



Attiwandaron Flints.



Fig. No. 33,684.



Fig. No. 33,685.

These two arrowheads, Nos. 33,684—33,685, were found at widely different places. The larger one on the banks of McKay's Creek, Oxford Co.; the smaller one on the banks of the Assiniboine River, Sask. They are made from the same chert, and fashioned in the same manner. The Attiwandarons were very extensive flint-workers, and the inference is that they supplied those artifacts by tribal trade to the tribes occupying the Plains of the West; the northern Algonquins, through the Hurons, probably being the intermediaries in trade. Artifacts of flint are very numerous in the Attiwandaron territory; even to this day they are frequently picked up as surface finds all over the western counties of Ontario. The flint material in this district is quite the equal of that obtained from the great flint ridge, Licking County, Ohio, or from the celebrated mines in Missouri; with the Attiwandaron quarries on Lake Erie, as with most of the other quarries, the workings ceased about 1650.



Attiwandaron Scrapers.

SCRAPERS, STEMMED.

The same remarks as to form and method of making apply to stemmed scrapers as to blunt arrows, except that the chipping of the end is always from one face so as to produce the chisel edge. This edge is frequently smooth or polished from use. They would answer very well for smoothing down articles made of wood, or for cleaning hides in tanning; they would also serve excellently for removing scales from fish, and as they are usually abundant in the vicinity of good fishing places, they were no doubt employed for this purpose.

"Scrapers are commonplace tools, yet they played an important part in the life of ancient men. They illustrate his economy, for we know that he made over broken spear-heads and arrow-points into scrapers.

"I have endeavoured to show in these illustrations all types from the circular disc with the scraping edge to the highly specialized forms. Of course, scrapers and knives merge the one into the other, and where the scraper ends the knife begins.

"Series can be arranged in any large collection beginning with simple knife and working back to the scraper or vice versa. In the Mandan village-site ash-heaps more than seven hundred scrapers were found by Mr. E. R. Steinbrueck; the large Mandan Collection of five thousand specimens, which contains them, was presented to our museum through the kindness of Professor E. H. Williams, Jr.

"In the past, among archaeologists, there has been no little discussion with reference to scrapers. They were mounted in short handles of both bone and wood. Numbers of them have been found in the cliff houses in the south-west attached to their original handles.

"It is unfortunate that in the Mississippi Valley, east of the Great Plains, the climate is such that none of the larger bone tools have withstood decay. At Madisonville, the cemeteries and ash-pits have furnished us with some of the larger bone handles, but elsewhere all have disappeared. Stone scrapers were inserted by the Plains Tribes in bone handles, and under the chapter devoted to bone objects several of the handles will be illustrated. One of these was found near the head of the Missouri River about twenty years ago, and apparently had been lying on the surface for a considerable length of time. It is of old type, and I have taken it to represent how the scrapers in ancient times might have been mounted. There are some similar tools in the Smithsonian, American Museum of Natural History, Peabody Museum, and other institutions. Scrapers are few in New England compared to the Mississippi Valley and the North.

"In view of the small number of flint implements occurring on the Great Plains, which the Indians called the "buffalo country," there are more scrapers of yellow chert, poor jasper, and white flint, in proportion to other parts of the country than elsewhere in the United States. By the buffalo country I mean all the territory drained by the following rivers: The Missouri, Red, Brazos, Arkansas, Mississippi, and tributaries. The Indians of this region, particularly of the Dakotas, Nebraska, Kansas, Iowa, and Texas, depended on the buffalo. The buffalo was used by them for manifold purposes: (1) Food, (2) bones for implements and weapons, (3) glue from the hoofs, (4) strings from the sinews, (5) skin for garments, (6) skin for dwellings, (7) skin for boats, (8) hide for packing-cases and bags, shields, etc., (9) skull for ceremonies, (10) the small bones for rattles, (11) the hair for filling material, (12) droppings for fuel, etc., etc.

“The preparation of hides was perhaps the most important work, and required the attention of all the women in each village and consequently the employment of thousands of scrapers and flint knives. The value of the buffalo to the aborigines cannot be over-estimated. The Indian killed and made use of every part of the animal, and the hide-hunters and white men, who made record killings simply to satiate a lust for blood and slaughter, exterminated the Buffalo; chief of these was W. F. Cody, or “Buffalo Bill,” who killed 4,280 buffalo in fifteen months, according to Professor W. T. Hornaday in the Smithsonian Report for 1887. The slaughter of the buffalo by himself and nameless Bills and Dicks, of frontier fame, was responsible for much of the trouble with our Plains tribes. Canada was cursed with no such class of frontiersmen, and Canada never had one twentieth part of the trouble with her Indians that we had with ours. The extermination of the buffalo by the white hide-hunters was justly considered a national calamity by the Indians of the West. It menaced their very existence and made paupers of whole tribes.”—(Stone Age in N.A.)

GOUGES.

We illustrate here three varieties of gouges found in the Attiwandaron Territory. The workmanship upon these is simply perfect. The one with a gouge on one end, and axe on the other, is a most unique specimen. It is made from very hard slate and elegantly polished. No. 9,862 is a typical gouge made from granite. The groove extends from edge to the base.

Professor George H. Perkins, speaking of gouges, says:—

“Although by no means confined to the Champlain Valley, the gouges may be regarded as very characteristic of this region, for, unless I am in error, they are found here more abundantly and in greater variety than elsewhere.

“None of our specimens, not even the best ‘banner stones,’ are more beautifully finished or of handsomer material than some of the best of our gouges. As is true of other objects, there are all grades of rudeness or elegance in these. As a class, however, the gouges are more carefully shaped and more perfectly finished than most other implements. Indeed, some are so finely finished, of such attractive material, and so apparently unused, that it is very difficult to conjecture for what purpose they were made. They are of only moderately hard foliose slate, often of a greenish-drab color, and could not be used for any hard work without very evident abrasion, and yet most of them do not show anything of the sort. The surface is not only smooth, but well polished and the edge is sharp.

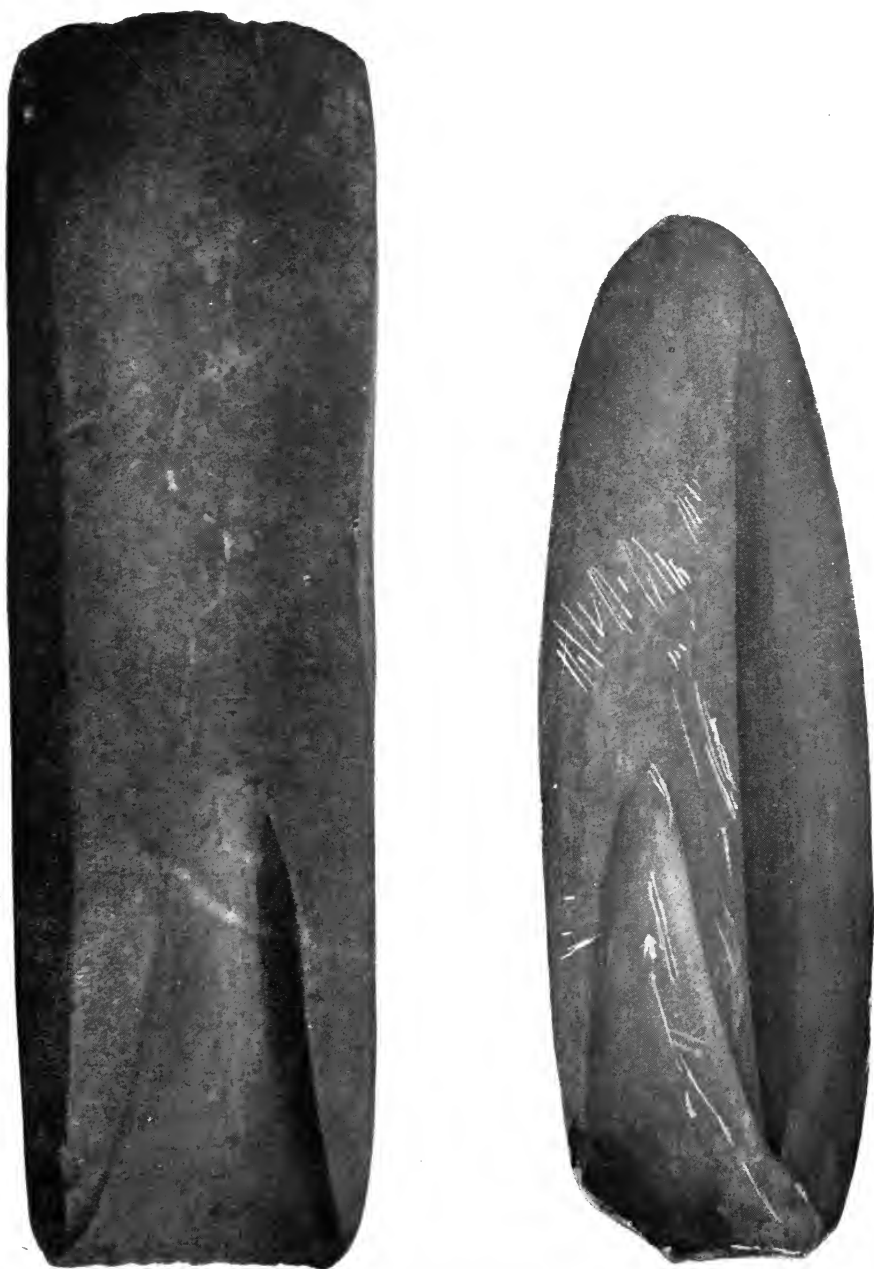
“While, as has been noticed, great variety occurs in the shape of the gouges in general, these are long, slender, flat, or slightly concave on the upper side and strongly carinate on the other, so that a cross-section has the form of a narrow, sharply pointed arch. The groove may, as in the figure, extend throughout the whole length, or only part way.

“These finer examples are usually longer. Evidently great care and labor were expended in fashioning such gouges as the long one figured, and they must have been made for some important purpose, but what that purpose was I cannot imagine. Diligent search in various old accounts which early explorers have left us has failed to bring any satisfactory explanation of these singular objects.

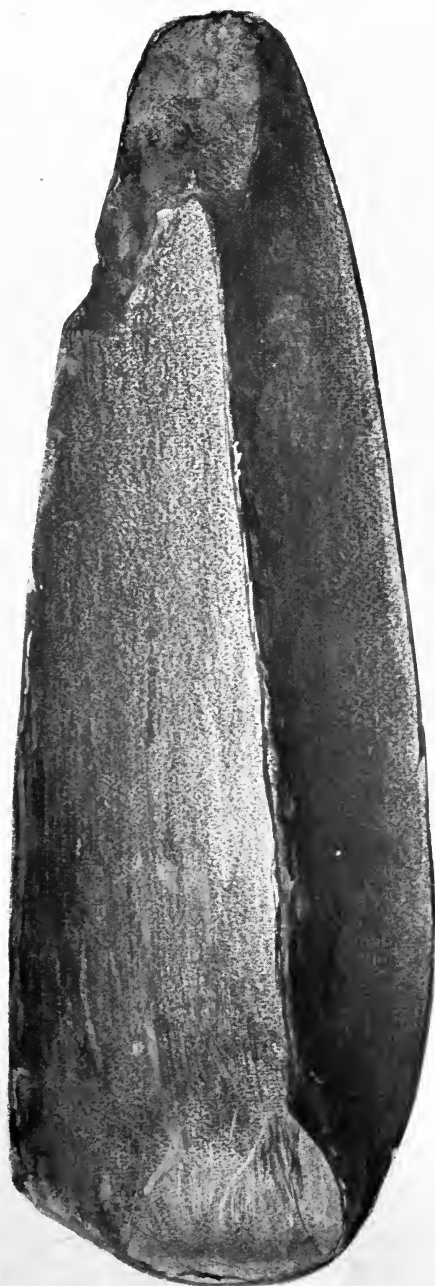
“But however these were used, there can be no doubt as to the use of most of the gouges. By far the larger portion are of hard stone, well fitted to endure rough service. In these, of which we have a number of specimens, one end is hollowed and curved to form a regular gouge edge, while the other is straight and bevelled to form a chisel. More rarely, both ends are hollowed, and of course in these the groove runs from end to end. As to the use for which the gouges were usually intended, there have been numerous suggestions, but none is entirely satisfactory.

“In one of his accounts Champlain speaks of seeing Indians on the coast of Maine making canoes, dug-outs, etc., by charring a properly prepared log and scraping out the burned portions, then charring again, and thus by alternate charring and scraping, they accomplished the desired end. Water poured over portions of the wood that were to be retained confined the burning, which was done with hot stones, to the part to be hollowed.

“No theory of the use of these gouges so well explains the excellent condition in which most of them are found as does the one that they were used chiefly in excavating or cutting where wood had been more or less charred. Among considerably more than a hundred of these specimens that have been found in this region by far the greater number do not show much, if any, effect of use.”



Attiwandaron Gouges.



Attiwandaron Gouge.—No. 9,862.

PIPES.



Side View. Fig. No. 91.



Back View. Fig. No. 91.

This pipe, No. 91, was found just south of the Southwold Earthworks and probably was a Peace Pipe smoked by the ancient Attiwandarons during their long occupancy of this, the ancient capitol of their once powerful confederacy. What remains of this old fortification is simply a circular rim of earth enclosing about two and one half acres of ground; within the enclosure and around it the forest still stands; monuments to the memory of Souharissen, probably the last chief of this great agricultural people, and this beautifully made pipe may have been smoked as the pipe of peace when Dallion was made his ward.



Fig. No. 32,858.

Figure No. 32858 is a clay pipe, found in the township of Blanshard. While it is small, yet its capacity for tobacco corresponds with those of a much larger size. It is well shaped and has a very fine polish; in fact, looks as if it might have been glazed. The stem shows no evidence of wear. The Indians in ancient days rarely held the pipe with their teeth, their hands and lips being sufficient. This pipe, while very much larger than their infant pipes, yet is small when compared with some of the massive clay pipes manufactured by them. In pipe-making, the Attiwandrons were, if anything, in advance of all the other branches of the Huron-Iroquois family.



Fig. No. 33,622.

Figure 33622 is a clay pipe found on Lot 31, Concession 18, E. Zorra, of the Geo. A. Smith Collection, and is the customary form used and made by all the Huronic tribes. Its outline reminds us of many modern forms; the clay is well baked and the hole in the stem is in the centre; and, as is usual in these clay pipes, there is no evidence of it being held between the teeth when being smoked.



Fig. No. 33,090.



Fig. No. 33,903.

These two bronze tomahawks, Nos. 33903 and 33090, the former one in the Brown Collection, was found near St. Mary's; the latter was found on the 8th Concession, Ops Township, Victoria Co., and presented to the museum by Judge Moore of Lindsay. These bronze tomahawks, as may be seen by the photogravure, are beautifully figured, elegantly marked and polished. The one from Lindsay has the steel at the end broken off; the other one is perfect. One other pipe of the same pattern forms a part of the Laidlaw Collection, and is illustrated in the Report of 1897, page 31. They are noticeably very much smaller than the

usual iron weapons, and probably were simply used for ornaments, or when smoking the Pipe of Peace. Though found in widely different places, west and east, yet all three were manufactured in the same place, in the same manner, and were evidently made by hand and not by machinery. These pipes were brought in by the French in the very early days; probably before the Attiwandarons had ceased to be a nation.

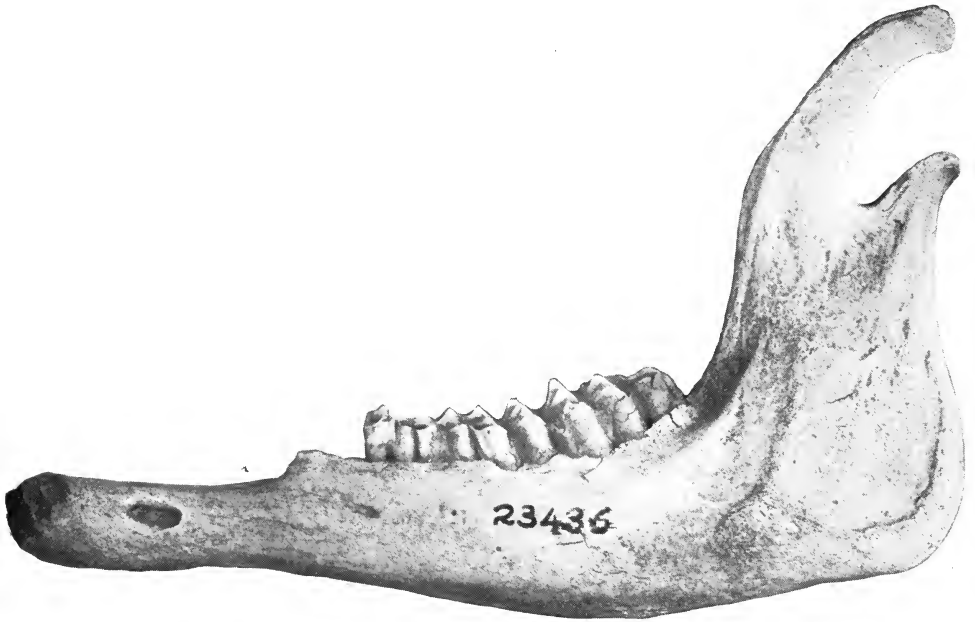


Fig. No. 23,436.

Figure 23436 is a left lower jaw of a red deer (*Virginianus*) found on the Seeley Farm, Brantford Township, and presented to the museum by F. W. Waugh, Toronto. These bones are rarely found and only in the hardwood ash-beds where they are preserved. Bones such as this were used by the Indian women to scrape the corn from the cob, and when experimented with is found to be an excellent article for such purpose. The Attiwandarons were very extensive cultivators of corn. The entire south-western peninsula has, from the evidences of their village sites, been at one time or another under cultivation.

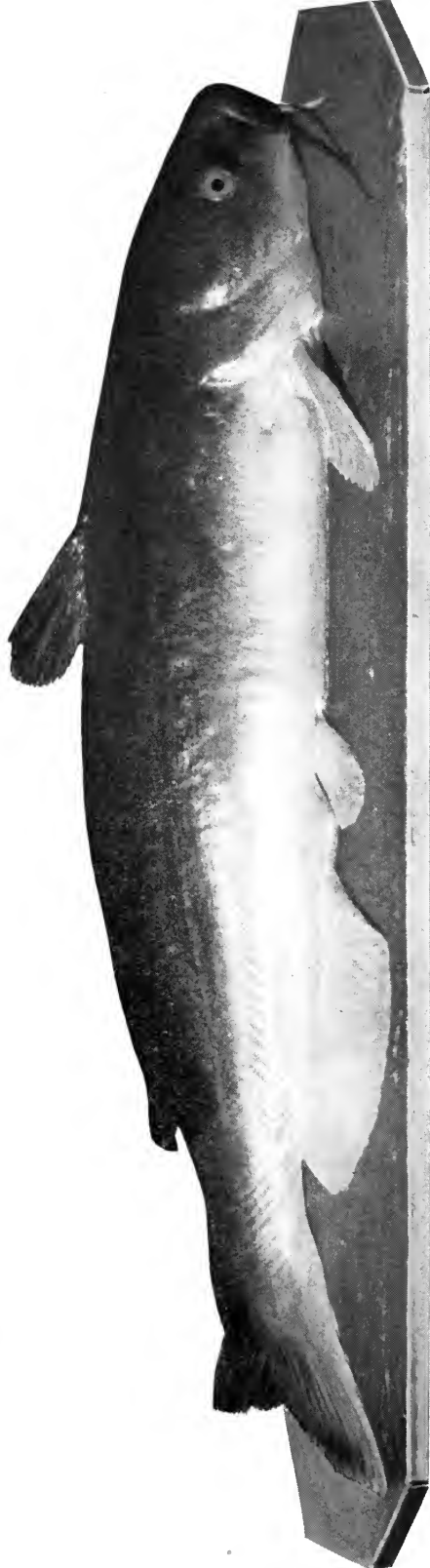
ADDITIONS TO MUSEUM

- 32115—Skin of seal. Obtained from Mrs. D. A. Jones, Beeton.
 32116—Buckskin embroidered picture mat. Obtained from Mrs. D. A. Jones, Beeton.
 32117—Buckskin embroidered picture mat. Obtained from Mrs. D. A. Jones, Beeton.
 32118—Pair moccasins (buckskin). Obtained from Mrs. D. A. Jones, Beeton.
 32119—Pair shoes (Esquimaux). Obtained from Mrs. D. A. Jones, Beeton.
 32120—Pair moccasins, long (deer-skin tops). Obtained from Mrs. D. A. Jones, Beeton.
 32121—Pair leggings (deer-skin tops). Obtained from Mrs. D. A. Jones, Beeton.
 32122—Model of Esquimaux kayak. Obtained from Mrs. D. A. Jones, Beeton.
 32123—Model of Esquimaux kayak. Obtained from Mrs. D. A. Jones, Beeton.
 32124—Esquimaux bag. Obtained from Mrs. D. A. Jones, Beeton.
 32125—Set of musical pipes. Obtained from Mrs. D. A. Jones, Beeton.
 32126—Fish line and sinker. Obtained from Mrs. D. A. Jones, Beeton.
 32127-31—Stone pipes. Obtained from Mrs. D. A. Jones, Beeton.
 32132—Stone tray lamp. Obtained from Mrs. D. A. Jones, Beeton.
 32133—Walrus skull. Obtained from Mrs. D. A. Jones, Beeton.
 32134—Large walrus tusk. Obtained from Mrs. D. A. Jones, Beeton.
 32135—Small walrus tusk. Obtained from Mrs. D. A. Jones, Beeton.
 32136-37—Small walrus tusk. Obtained from Mrs. D. A. Jones, Beeton.
 32138—Toggle Point. Obtained from Mrs. D. A. Jones, Beeton.
 32139—Toggle point. Obtained from Mrs. D. A. Jones, Beeton.
 32140—Carved bone needle case. Obtained from Mrs. D. A. Jones, Beeton.
 32141-48—Small pieces of bone (carved). Obtained from Mrs. D. A. Jones, Beeton.
 32149—Polar bear tooth. Obtained from Mrs. D. A. Jones, Beeton.
 32150—Piece of ivory (worked). Obtained from Mrs. D. A. Jones, Beeton.
 32153-32598—By exchange with Clayton McCall, Esq.
 32153-191—Fragments of pottery; Charlotteville and Walsingham townships.
 32192-247—Stone axes, adzes and chisels.
 32248—Stone gouge.
 32249—Stone implement.
 32250—Arrow head, British Columbia.
 32251-583—Arrow heads, Norfolk Co.
 32584-589—Scrapers. Norfolk Co.
 32590-98—Drill. Norfolk Co.
 32599 to 33088—Procured from L. D. Brown, Esq., St. Mary's.
 32599-627—Stone adzes, axes, etc., townships of Blanshard and Nissouri.
 32628—Hammer stone, N-W. Territories.
 32629—Stone axe, Nissouri township.
 32630-633—Stone chisels or small adzes. Nissouri township.
 32634-35—Stone gouges, Nissouri township.
 32636—Imperfect grooved axe, township Nissouri.
 32637-38—Large grooved hammers. Dakota and N-W. Territories.
 32639—Grooved axe, N-W. Territories.
 32640—Rubbing stone, Michigan, U.S.
 32641-809—Chert specimens, arrow heads, spear heads, etc.
 32810-820—Fragments of pottery, township of Nissouri.
 32821—Shell, old Fort Dorchester.
 32822—Bow and arrow. Oklahoma, U.S.A.
 32823—Stone club. N-W. Territories.
 32824—Pair moccasins, Alaska.
 32825—One small beaded bag, Alaska.
 32826—One tusk. township of Nissouri.
 32827—Piece of bone, Dorchester and London townships.
 32828—Piece of bone, Dorchester and London townships.
 32829—Piece of bone, Dorchester and London townships.
 32830-31—Teeth, Nissouri and London townships.
 32832—Bone pendant, township of Blanshard.
 32833-35—Bone awls, London and Dorchester townships.
 32836—Piece of bone. London and Dorchester townships.
 32837—Sandstone pipe, N-W. Territories.
 32838—Small beaded pouch, Oklahoma, U.S.A.
 32839—Pair beaded moccasins, N-W. Territories.
 32840—Beaded mat. Oklahoma, U.S.A.
 32841—One large stone hammer. N. Dakota, U.S.A.
 32842—Catlanite pipe, N-W. Territories.
 32843-44—Bird amulets, township of Blanshard.
 32845—Wampum, Oklahoma, U.S.A.

- 32846—Old knife, found in Nissouri township in 1836.
 32847—Brass shell, taken from Custar's Battle field.
 32848—Piece of bone, taken from Custar's Battle field.
 32849—Catlanite spear point.
 32850—Uma pottery, Arizona.
 32851—Modern caved stone knife, township Blanshard.
 32852—Suture cap, Old Man River, McLeod, Alta.
 32853—Piece of partly worked red slate, township of Dorchester.
 32854—Small stone knife, township of Dorchester.
 32855—Piece of pottery, township of Dorchester.
 32856—Bowl of clay pipe, township of Dorchester.
 32857—Bowl of clay pipe, township of Dorchester.
 32858—Small clay pipe, Dorchester Tp.
 32859—Shell, Blanshard Tp.
 32860-61—Shells, township of Blanshard.
 32862—Metal spear point, Eskimo.
 32863-67—Fragments of banner stones, township of Blanshard.
 32868-69—Fragments of gorgets, township of Blanshard.
 32870—Gorget, Township of Blanshard.
 32871—Half of banner stone, township of Nissouri.
 32872—Stone implement, township of Nissouri.
 32873-75—Gorget, township of Nissouri.
 32876—Gorget, township of Downie.
 32877—Gorget, township of Zorra.
 32878—Gorget, township of Nissouri.
 32879—Gorget, township of Nissouri.
 32880—Gorget, township of Downie.
 32881—Gorget, township of Blanshard.
 32882-85—Gorgets, township of Nissouri.
 32886—Fragment of gorget, township of Nissouri.
 32887—Gorget, township of Nissouri.
 32888—Fragment of gorget, township of Nissouri.
 32889—Stone axe, Lake Erie.
 32890—Ceremonial stone, Nissouri.
 32891—Fragment of banner stone, Nissouri.
 32892—Stone tube, Nissouri.
 32893—Bowl of a soapstone pipe, County Welland.
 32894—Six partly work stones, township of Nissouri.
 32895—Stone chisel, township of Nissouri.
 32896—Stone tube, township of Nissouri.
 32897—Soapstone pipe, township of Nissouri.
 32898—Iron tomahawk pipe, township of London.
 32899-902—Iron adzes, township of London.
 32903—Bronze tomahawk pipe, township of London.
 32904-33087—Arrow heads, township of Blanshard.
 33088—Bangles, made of deer toes.
 33089 to 33113—Gift of F. D. Moore, Esq., K.C., Lindsay, Ont.
 33089—Pistol trap, near Fairburn Post Office.
 33090—Bronze tomahawk pipe, 8th Con., Ops township, Victoria County.
 33091—Iron tomahawk, Minden township, Haliburton county.
 33092—Quartz arrow head, Lake St. John, near Orillia.
 33093-102—Fragments of pottery, Ops township.
 33103—Stone whorl, Ops township.
 33104—Stone whorl. Ops township.
 33105—Rubbing stone, n.w. quarter lot 16, con. 5, Barapora township, Victoria county.
 33106—Hammer stone, n.w. quarter lot 16, con. 5, Barapora township, Victoria county.
 33107—Stone chisel or adze, n.w. quarter lot 16, con. 5, Barapora tp., Victoria county.
 33108—Stone chisel or adze, n.w. quarter lot 16, con. 5, Barapora tp., Victoria county.
 33109-111—Stone chisels or adzes, east pt. of s.w. quarter lot 2, con. 3, Ops township.
 33112-113—Fragments of stone chisels of adzes, s.w. quarter lot 2, con. 3, Ops township.
 33114—Horseshoe, etc., used at one time by the Wells-Fargo Express Co.
 33115—Chert scrapers, River Thames, near Dorchester. Gift of M. Smith, London.
 33116—Stone adze, s. boundary Blanshard township. Gift of Geo. McDonald, Esq.
 33117-122—Chert arrow heads, s. boundary Blanshard township. Geo. McDonald, Esq.
 33123-124—Stone axes, lot 33, con. 4, Nissouri W. R. Sidney Bridgeman, Esq.
 33125—Chert specimen, lot 33, con. 4, Nissouri W. R. Sidney Bridgeman, Esq.
 33126-130—Arrow heads, lot 33, con. 4, Nissouri W. R. Sidney Bridgeman, Esq.
 33131-133—Stone adzes, lot 28, con. 4, Nissouri W. John E. Bowers, Esq.



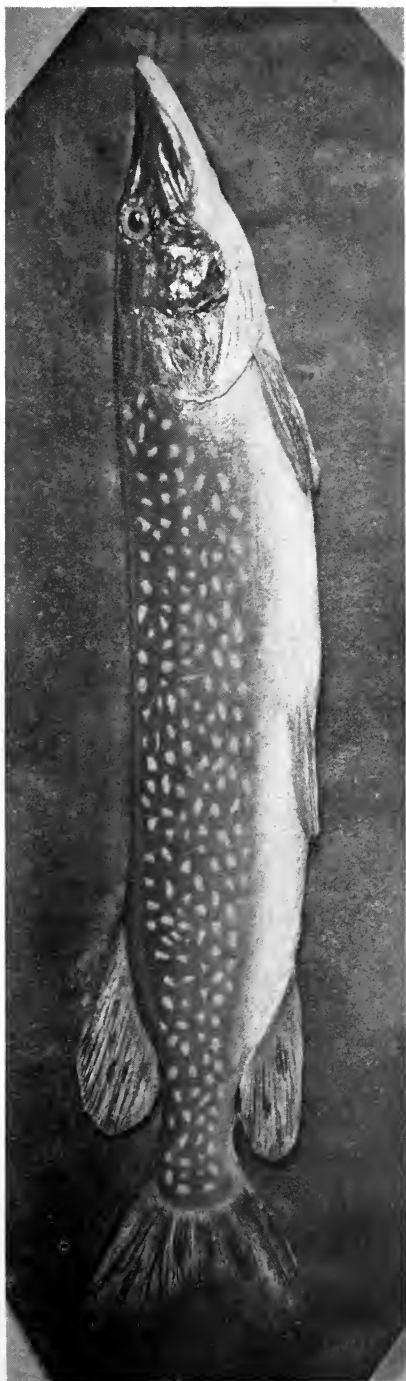
CAST OF GARFISH. (*Lepisosteus osseus*.)
From Lake St. Clair.



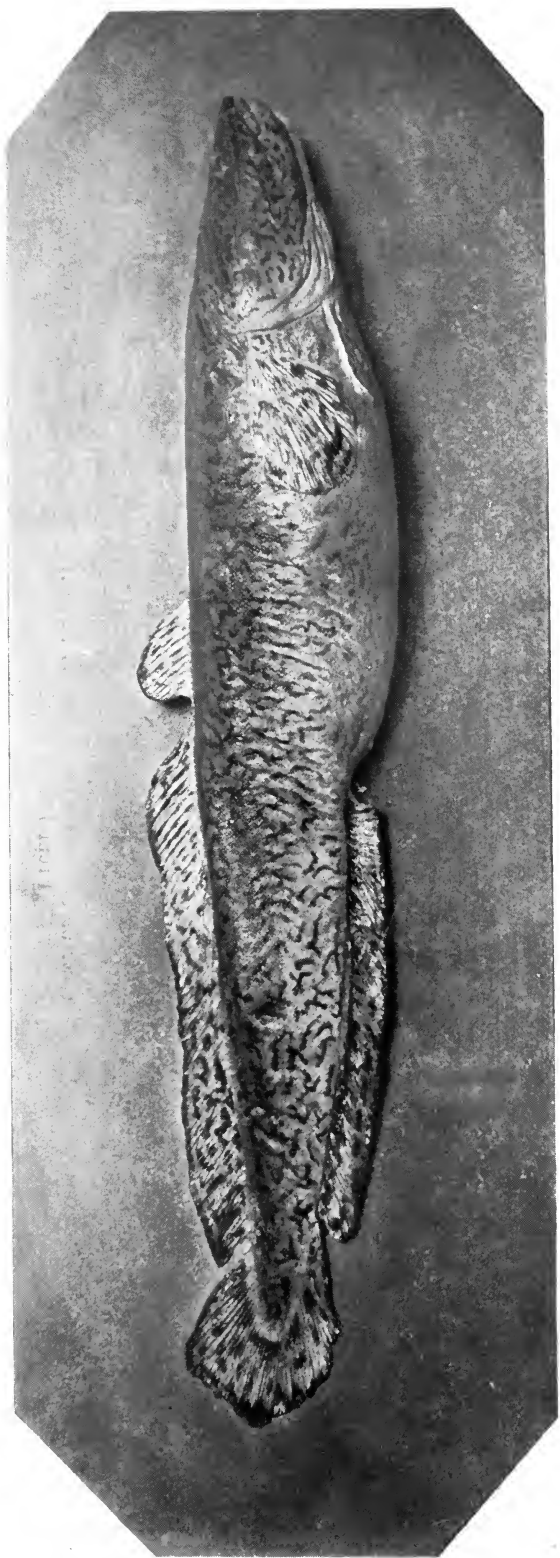
CAST OF CHANNEL CATFISH. (*Ameiurus lacustris*.)
From Lake St. Clair.



CAST OF LAKE STURGEON. (*Acipenser rubicundus*.)
From Lake Huron.



CAST OF COMMON PIKE. (*Lucius lucius*.)
From Lake Ontario.

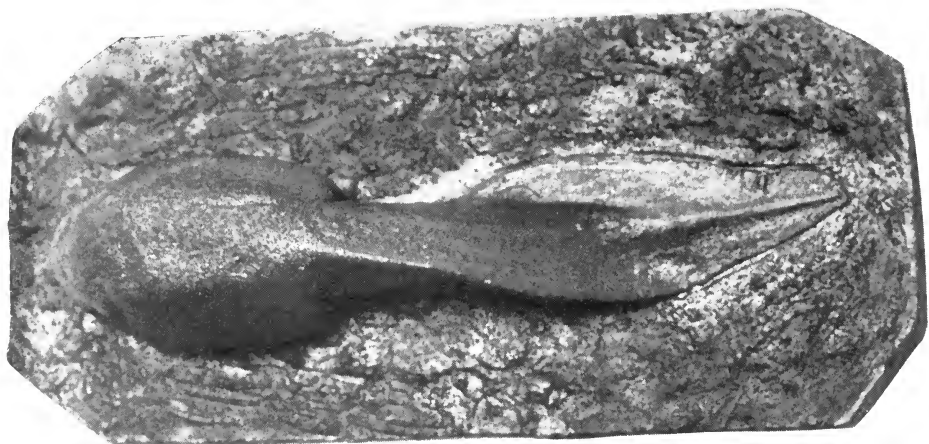


CAST OF LING. (*Lota maculosa*.)
Great Lakes.

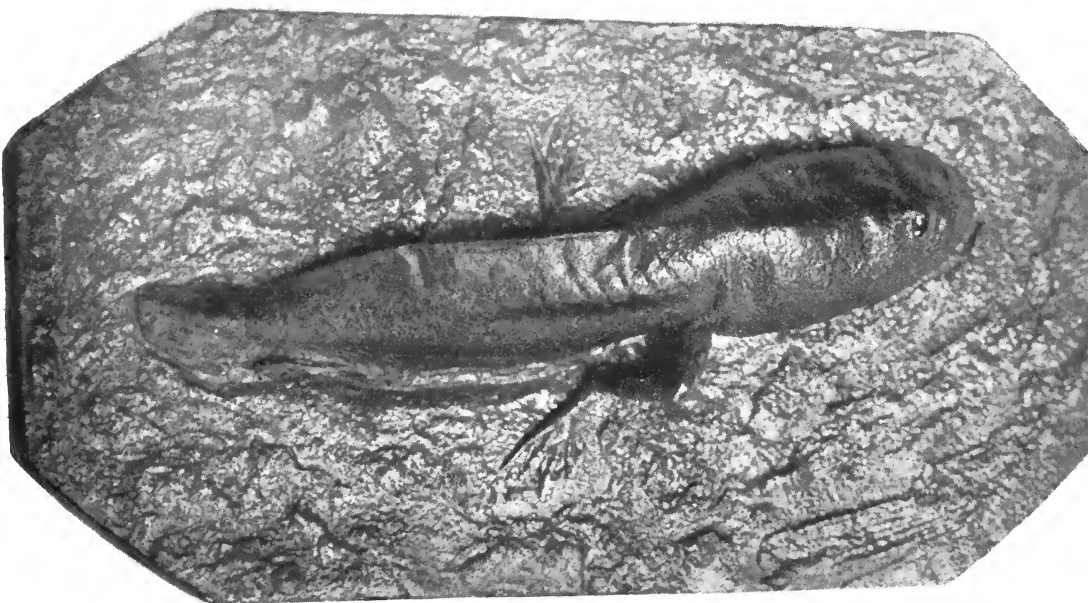


CAST OF CARP (*Cyprinus carpio*).

Introduced from Europe; now common in the Great Lakes region of Ontario.



CAST OF TADPOLE OF GREEN FROG.
First stage.



CAST OF TADPOLE OF GREEN FROG.
Second stage.



CAST OF BULL FROG. (*Rana catesbeana*.)
From Lake St. Clair.



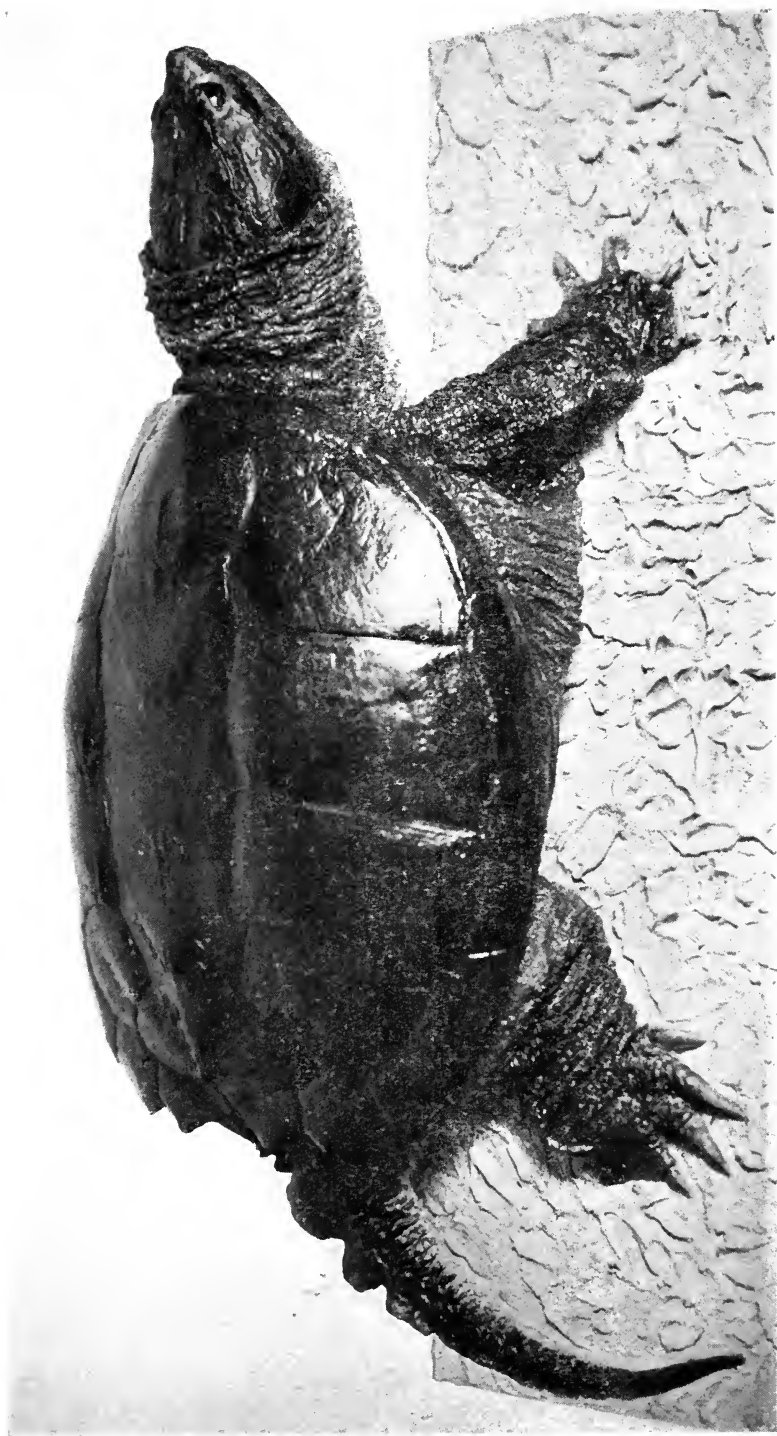
CAST OF RIBAND SNAKE. (*Thamnophis sauritus*.)
Toronto.



CAST OF WATER SNAKE. (*Natrix sipedon*.)
From Parry Sound District.



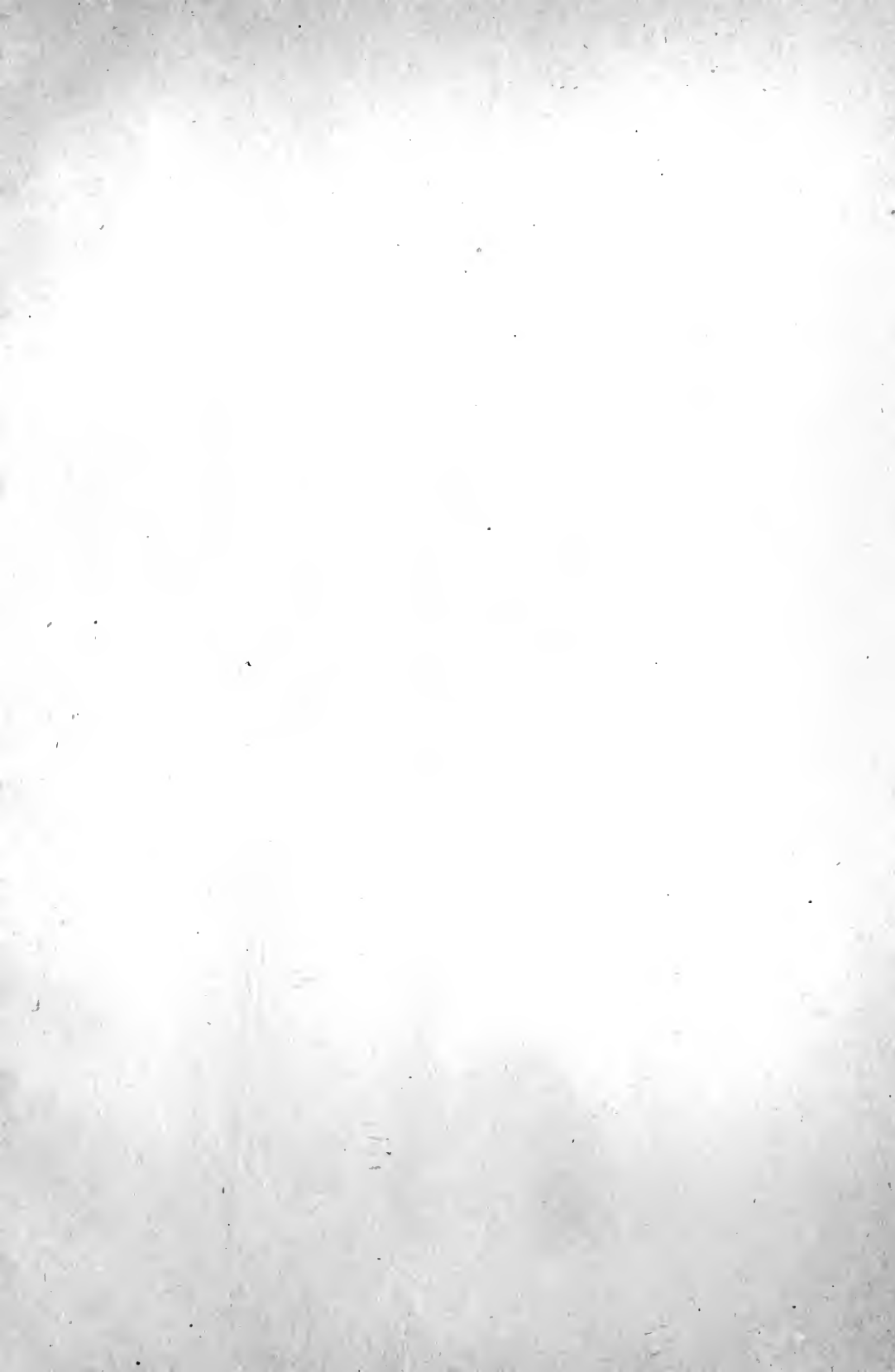
CAST OF BLACK SNAKE. (*Bascanon constrictor*.)
From Essex County, Ontario.

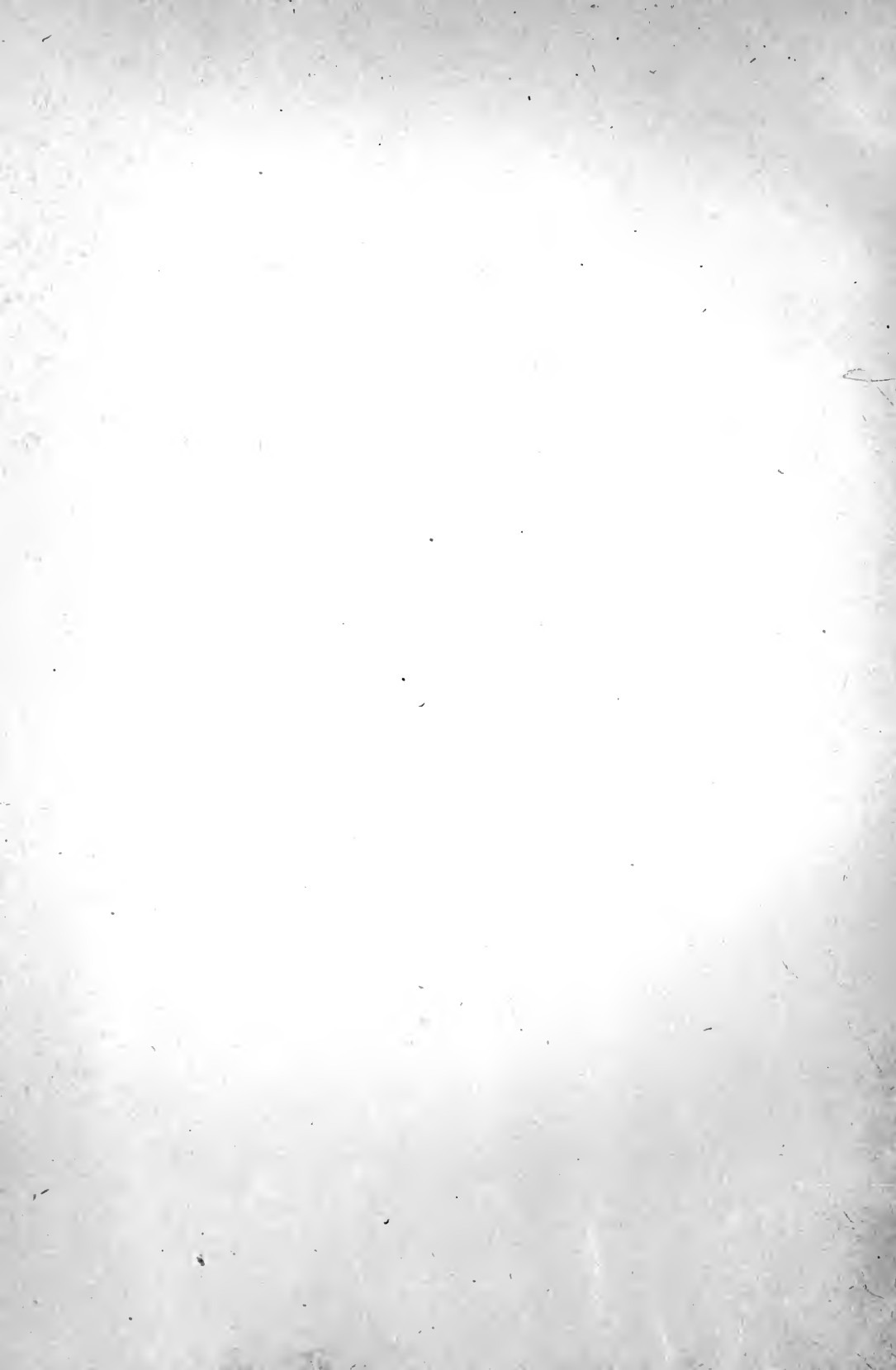


CAST OF SNAPPING TURTLE. (*Chelydra serpentina*.)
From Toronto Bay.











THE HONOURABLE WILLIAM HOWARD HEARST
PRIME MINISTER OF ONTARIO

ANNUAL Archæological Report

1914

BEING PART OF

Appendix to the
Report of the Minister of Education,
Ontario.

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO.



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PRESENTATION

TO the HONOURABLE R. A. PYNE, M.D., LL.D., MP.P.,

Minister of Education.

SIR,—In presenting you with this, the Twenty-sixth Annual Report of the Ontario Provincial Museum, it affords me much pleasure in stating that this year has been a very prosperous one. The number of specimens added to the Museum since the last Report are 2,550.

Increased space is greatly needed to exhibit what we have stored. We are indebted during the past year to A. M. Kennedy, Esq., Weston; Col. G. E. Laidlaw; Mrs. Minnie Graburn, Toronto; E. R. Steinbrueck, Mandan, N.D.; T. R. Mayberry, Esq., M.P.P.; J. P. Hall, Esq., Brown's Town, Jamaica; Mrs. W. A. Orr, Los Angeles; John Ross Robertson, Esq.; L. D. Brown, Esq.; C. A. H. Clark, Esq., and others.

I have the honour to be,

Sir,

Your obedient servant,

ROWLAND B. ORR,

Director.

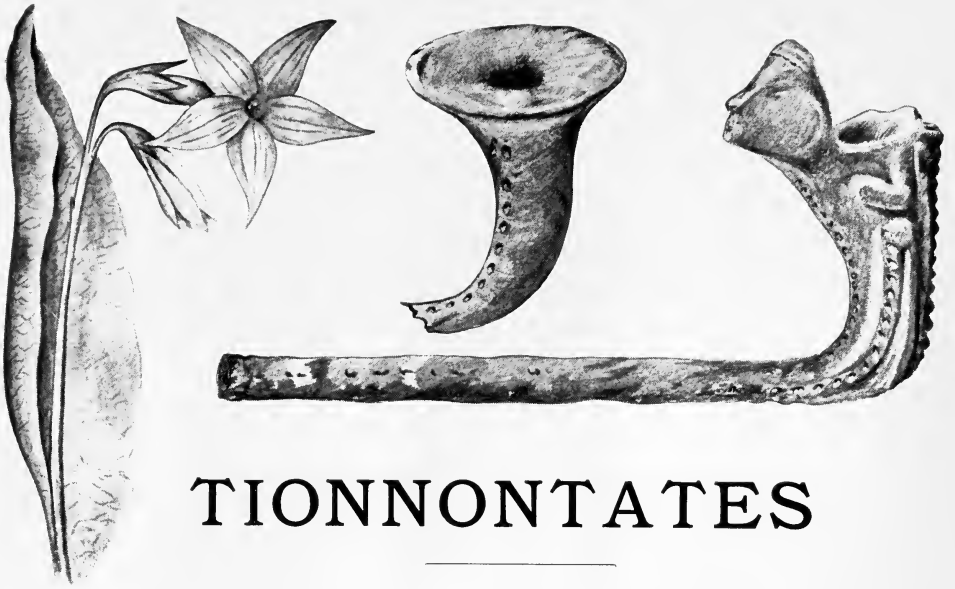
Toronto, Dec. 30th, 1914.

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“With regard to my theory on the relatively recent period of American civilization and its Toltec origin, I am far from being the first in upholding it, since Stephens and Humboldt affirmed it some fifty years ago, whilst all the ancient chroniclers implied it. Is ancient Egypt less interesting because her MSS. are now read and her origin known? Why then should the people who raised the American monuments be less deserving of our regard, because they built them ten centuries sooner or ten centuries later? Does it alter the character of the monuments or destroy an art unknown to us hitherto? The question of first origins has always seemed to me an idle pursuit; and if the evolutionist doctrine is true, a perfect moral microscope would be required to reach the remote past of man, whose countless generations, scattered in every clime, go back to the dark period when our rude progenitors were hardly distinguished from the brute creation.”—
“The Ancient Cities of the New World,” Désiré Charnay.



TIONNONTATES

THE PETUNS OR TOBACCONATION

OF

NOTTAWASAGA LOWLANDS

Before entering upon a brief history of the Petuns or the Tobacco Tribe, whose hunting grounds, in the fifteenth century, covered the lands now included in the counties of Grey and Bruce, it may add something of value to our article if we give a preamble epitomising the lives of Champlain and the Franciscan priest, Joseph Le Caron, who were the first white men to visit the Tionnontates and record their impressions of the unfortunate tribe and its regional habitats.

SAMUEL DE CHAMPLAIN.

Samuel de Champlain, soldier, colonizer, and navigator, was born in the year 1570 at Brouage, a picturesque little town in the department of Saintonge, France. In his youth he took service with a cavalry troop and served for a time in the wars conducted by Henry IV, King of France.

The career of a soldier did not appeal to him and he left the Service and became a mariner. In his "Les voyages du Sieur de Champlain" he tells us: "Navigation seems to me to occupy the first place. By this art we obtain a knowledge of different countries, regions, and realms. This is the art which induced me to explore the coasts of a portion of America, especially those of New France." In January, 1599, he sailed to Mexico, the West Indies, and Panama. On his return he wrote the record of his cruise, illustrating it with charts, etc. In March, 1603, he made his first voyage to Canada, charting the Gaspian Coast and the St. Lawrence River up to the falls of St. Louis. In May, 1604, with De Monts, he explored the coast of Nova Scotia and founded a colony at Port Royal. He returned to France in 1607, but sailed the next year for Canada and laid the foundation (1608) of the City of Quebec. In 1609 he discovered Lake Champlain



Champlain-

Samuel de Champlain.

when he accompanied a war party of Hurons and Algonquins on an expedition against the Iroquois. In October, 1612, he was made Lieutenant-Governor of New France.

In the year 1611 he continued his exploration of the St. Lawrence and broke ground for the erection of a building at Place Royale, on the site now covered by the City of Montreal. In the year 1613 he explored the region above Sault Saint Louis, visiting "Les Gens de Terre," "Les Tetes de Boules," tribes of the Gatineau and the River Rideau and visited the Chaudiere Falls and the Algonquins of Allumette Island.

In the year 1615 he ascended the Ottawa, which he calls in his journal "*Le Riviere des Algonquins*," descended French River and skirting the shore of Georgian Bay joined at Carhagouha (Township of Tiny) Father Le Caron, the Récollet, who, with twelve Frenchmen had reached the Huron Country a few days in advance of Champlain. Returning from an expedition against the Iroquois, he passed the winter 1615-16 with the Hurons, visiting with Le Caron the Petuns or Tobacco Nation, whose hunting grounds lay to the south-west of the Hurons in the present Counties of Grey and Dufferin. He then crossed into the lands of the *Cheveux Relevés*, a Chippewa sub-tribe, afterwards known as the Mississaugas, and other Algonquin families.

On May 20, 1616, accompanied by Algonquins and Hurons he descended to Quebec, from which town he sailed for France, arriving at Honfleur September 10th. He soon returned to Quebec and passed the remainder of his life in building up his Colony. On Dec. 25th, 1635, Champlain died in Quebec City, where a splendid monument commemorates his explorations and achievements.

The Abbe Ferland, Bancroft, Dionne, Garneau and Parkman are unanimous in their appreciation of the splendid qualities of head and heart which earned for Champlain an honourable and conspicuous place in modern history. Rochemonteix calls him a "providential man" and Charlevoix in his "*Histoire de la Nouvelle-France*" writes: "What we most admire in him are his fidelity to his great undertakings; his intrepidity when confronted with serious danger. his ardent and disinterested zeal for his country, his scrupulous regard for honour and uprightness, and above all, his heart, which was more concerned for the welfare of his friends than for his own interests."

He was a painstaking and voluminous writer. He bequeathed to us the following works: "*Bref discours des choses plus remarquable que Samuel Champlain de Brouage a reconnu aux Indes Occidentales*"; "*Des Sauvages, ou voyages de Sieur de Champlain fait en l'an 1603*"; "*Les Voyages de Sieur Champlain Xaint-congeois*"; "*Voyages et discourvertures en la Nouvelle-France depuis l'année 1615 jusques à la fin de l'année 1618*"; "*Les voyages de la Nouvelle-France Occidentale faits par le Sieur de Champlain depuis l'an 1603 jusques en l'année 1629*"; "*Traité de la Marine et du devoir d'un bon Marinier*"; His writings in six volumes, edited by Abbé C. H. Laverdiere, were published in the year 1870, under the auspices of the Faculty of the University of Laval, Quebec. The learned Abbé prefaces the first volume with an illuminating dissertation on Champlain, his triumphs, voyages and explorations. In the Laval Edition the account of Champlain's visit to Panama and Mexico is not inserted. His last work published in 1632 is by Sieur de Champlain, Captain of the King's Marine Service; and all the discoveries made by the same from 1603 to 1629. His explorations in Canada ended in 1616.



Landing Place of Champlain. Dugas Bay, Trout Lake, Portage to Lake Nipissing.

JOSEPH LE CARON.

As the honour of being the first missionaries to enter the Maritime Provinces belongs to the Jesuits who came to Canada in 1611, so the distinction of being the first to preach Christianity to the tribes west of Quebec rests with the Franciscans.

Answering the invitation of Champlain three priests of the Recollets, John D'Olbeau, Denis Jamay, Joseph Le Caron, and Pacific Duplessis, a lay brother, arrived at Quebec in the month of June, 1615. The Recollets, called also "Fathers of the Strict Observance," opened their first establishments in Paris in 1605. Henry IV., Louis XIII., and Louis XIV., favoured them particularly. Louis XIV. appointed Recollets chaplains to his troops and founded a monastery for the community in 1678 near his royal residence at Versailles.

Immediately after their installation they divided between them their missionary allotments. Jamay was appointed Commissary General, remaining at Quebec, where he devoted himself to the spiritual demands of the colonists. D'Olbeau departed for the Saguenay tribes to winter with the Montagnais, and Father Le Caron set out, in the summer of 1615, for the Huron hunting grounds in western forests.

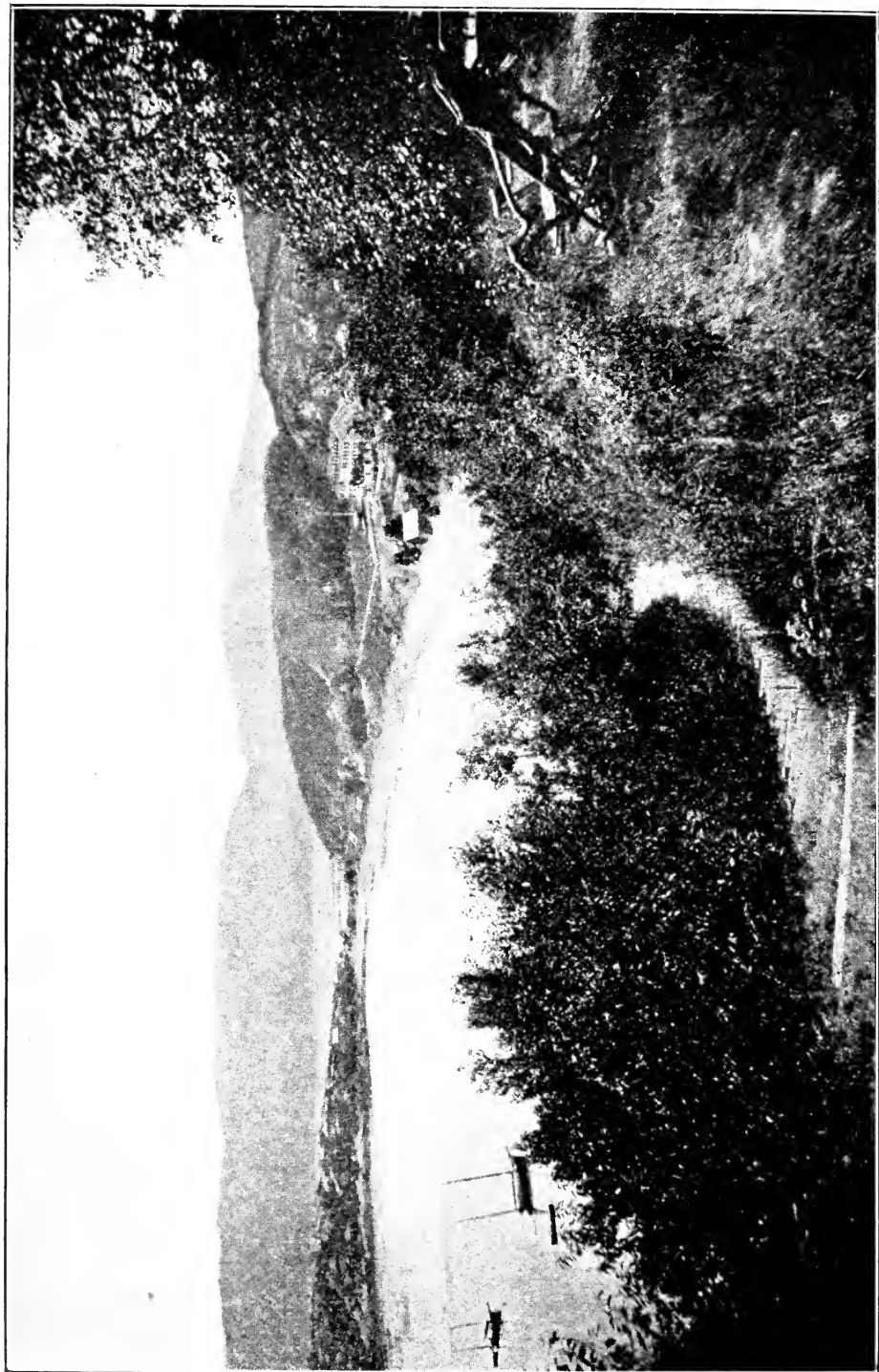
Joseph Le Caron, according to an entry in the "Martyrology of the Recollets for the Province of Saint Denys" was born in the suburbs of the City of Paris in the year 1586. Soon after his ordination to the Priesthood he was appointed Chaplain and Preceptor of the Duke of Orleans. Resigning his position after the demise of his Royal Patron he became a member of the Community of Recollets in 1610, and took the three vows of Poverty, Chastity and Obedience in 1611. When in 1614 Champlain appealed to the Recollets in France for missionaries for Canada, Le Caron cheerfully volunteered for the service and with his three companions sailed with Champlain from the Port of Honfleur, April 24, 1615. The ship anchored at Tadoussac May 25, of the same year.

On July 7, in company with a band of Hurons and Algonquins of the Ottawa the zealous priest left Sault St. Louis and began his wondrous voyage of seven hundred miles to the great lake of the Hurons. With his swarthy companions he entered, early in August, the Bay of Matchedash and late in the afternoon was hospitably received and entertained in the Huron town of Caragouha (Township of Tiny). A few days after his landing he was joined by the intrepid Champlain.

In the winter of 1616 Champlain and Le Caron visited the Petuns or Tobacco tribe, (Bruce and Grey Counties), where Le Caron was coldly received and his expectations unrealized. Here is what Sagard (History of Canada, page 42) records of his reception: "The Missionary now visited the tribe of the Petuns where he encountered more disappointment than consolation; these barbarians extended to him no welcome nor manifested any signs that his visit was agreeable to them."

Returning to the villages of the Hurons, Le Caron passed the winter among them instructing the adults, catéchising the children and teaching to all the rudiments of civilization.

On the morning of May 20, 1616, he left for Quebec with Huron traders who set out from Carhagouha with canoes loaded with skins and peltries for the fur market at Three Rivers. On July 20, he sailed with Champlain for France, returning, April 11, 1617. When in France he was made Superior of the missions of New France. He now fixed his residence at Quebec, visiting Tadoussac, at the mouth of the Saguenay River, where for six years each winter he devoted himself to christianising the Montagnais Indians and those who came to trade from



Tadoussac.

the Mistassini region. In 1623 he was joined by two missionaries of his order who had come from France to assist him. One of these was Gabriel Sagard Theodat—commonly known as Sagard—historian of the Huron missions. The other was the priest, Nicolas Viel, drowned in 1625.

Accompanied by his two companions Le Caron again left (July, 1623) for the Huron country, and in August safely reached the Huron village of Carhagouha. Here Le Caron, assisted by Viel and Sagard, completed his dictionary of the Huron language. In June 1624, escorted by two hundred Hurons and a flotilla of sixty canoes loaded with mink and beaver skins, Father Le Caron departed for Quebec and the following year sailed for France. In 1626, with Champlain, he returned to Quebec, where he resided until 1629, in which year he resailed for France, where he was appointed Superior of the Monastery of the Recollets at Sainte Marguerite in Normandy. The brave and zealous priest, stricken by an infectious disease contracted while waiting on the sick, died at Sainte Marguerite, March 29, 1632, in the forty-sixth year of his age. Father Le Caron was a priest of large endowments. He spoke fluently the Huron and Montaignais languages, dictionaries of which he compiled and dedicated to the King of France. ("Necrology of the Recollets," Manuscript numbered 13875, National Library (Paris) Cf. also Sagard, *Le Clerque*, Gilmary shea.)

TIONNONTATES—THE PETUNS OR TOBACCO NATION.

In the year 1648 Iroquois warriors, chiefly Senecas and Mohawks, invaded Huron territory and on the morning of July 4th attacked and captured the frontier town of Teanaustayae standing on land within what is now the Township of Medonte, Simcoe County. Here the Jesuits had established the mission of St. Joseph with Father Antoine Daniel in charge. When the Iroquois stormed the town, its fighting men were miles away hunting and trapping, and only old men, women and children were in possession. After slaughtering the men, women and infants at the breast, they set fire to the village and began their homeward march to the Seneca towns, dragging with them seven hundred prisoners reserved for torture or adoption. The missionary Daniel was shot to death and his body thrown into the fire.

Early in the next year, 1649, the enemy returned, captured and burned two more Huron towns, slaughtering the inhabitants and filling the country with consternation and fear. This campaign led to the ruin of the Huron Confederacy of which the Khiontatehronon or Tionnontates formed an integral part. The Tionnontates, known to the early French and Recollet missionaries as the Petuneux or Tobacco Nation (Bressani-Martin, Ed. page 184, *Relation* 1648) had at the time of the incursion of the Iroquois their villages and hunting grounds in Nottawasaga Township, in the forests of the Blue Hills and occasionally in the Mountains of Saint John.

At the time of Champlain's and Le Caron's visit to them in 1616 they occupied lands in Bruce and Grey Counties, stretching from the mouth of the Saugeen River in the west to the lowlands of Nottawasaga Township. In a relentless war waged against them in the years 1636-38 by the Mascoutens and their allies the Potawatomes and Sauks they were driven from their own territory to the lands bordering the western shores of Nottawasaga Bay and the slope of the Blue Hills.

When the Iroquois raided the Huron territory in 1648-49 the Petun country lay to the west of Huronia proper, extending westward from the hills of Nottawasaga Township, Simcoe County, to the shores of Lake Huron and northward to

Cape Hurd. (Jones—"Huronian," page 228.) They were a sedentary people included among those tribes whom Sagard called the nobility of the land. "They and the other sedentary tribes may be regarded as the nobles of the Country. The Algonquins are the bourgeois (commoners) while the poor and wretched are represented by the Montagnais." (Sagard—H. du C., Ed. 1636.)

Their social and political institutions were founded strictly on blood kinship. Their dwellings or lodges were constructed of saplings and bark, were long and narrow, having eight or ten fires in each lodge and a specified number of families to each fire. These lodges were collected into villages and towns, palisaded and fortified when facing the enemies' frontier. They depended for their sustenance on



Site of Ste. Marie on the Wye.

horticulture and the chase. On the patches of ground which they cleared by burning or girdling the trees, they raised large supplies of corn for winter use, squashes, sunflowers for oil, beans of many varieties, and excellent tobacco for trade and home consumption. They were skilled hide-dressers and tanners. These skins and pelts served them for rugs, moccasins and raiment. When in 1640 the Jesuit Fathers opened among them the Missions of St. Joseph (Etarita) and St. Mathias (Ekarenniondi), the Tionnontates lived in nine villages inhabited by members of the clans of the *Deer* and the *Wolf* into which the nation was divided. The two clans numbered about fifteen thousand souls. Etharita or St. John of the Tionnontates, the capital of the Wolf clan, was probably near the Blue Hills in Grey County, and Ekarenniondi or St. Mathias, the principal town of the Deer clan, was somewhere in Nottawasaga Township, Simcoe County. The two villages would

probably number a thousand families. When Etharita was destroyed by the Iroquois on December 7th, 1649, Father Garnier, the missionary, was shot and tomahawked. This village lay nearest the frontier and was the only one of the Tionnontates destroyed by the enemy.

MIGRATIONS OF THE TIONNONTATES.

A people who have no literature have no tribal or national memories or records of the past. "Our Indians," writes the late Archbishop Taché, of St. Boniface, N.W.T., in 1868, "have no chronicles, no annals, no written monuments, nor records of any kind whatever." That this assertion bearing upon the conditions of the tribes of the Northwest applies to savages the world over we know from the writings of travellers and explorers of every age. "I could find no monuments or marks of antiquity among these Indians," writes Charles Waterton, the explorer. "I have seen nothing amongst these Indians which tells me that they existed here for a century; though for aught I know to the contrary they may have been here before the Redemption. Were I by chance to meet the son of the father who moulders here he could tell me that his father was famous for slaying tigers and serpents and caymen, and noted in the chase of the tapir and wild boar, but that he remembers little or nothing of his grandfather." (*Wanderings in South America*—London, 1839, p. 178.)

Defining in particular the position of the Indians of America, with reference to the knowledge we have acquired of them, we note that different fortunes have accompanied different tribes in their antecedents. Some parts of the eventful course of the race have been happy enough to find historians, as among the Aztecs of Mexico and the Mayas of Yucatan, who wrote reports of the events of their times. Such reports give us what is called documentary or monumental history.

But there are families of the race which lie outside of the margins of any local records. Their deeds and their past are unrecorded. Their records and their lives are like the portions which the Chinese comprise in their Annals, but which they expressly designate "Parts outside of History." Such unrecorded antecedents of the American Indian are embraced in the enigmatical words "Prehistoric America." So far as our information extends the tribes of the Canadian Wilderness before the coming of Jacques Cartier were as if they were non-existent. Their history is a blank and the events in their lives are buried beyond the hope of resurrection.

To speculate, then, on the original habitat and migration of the Huron-Iroquois and affiliated tribes is a waste of valuable time. That a tribe speaking the Huron language was in possession of the Island of Montreal when Jacques Cartier landed there in 1535 is now admitted by writers interested in the early history of the Huron-Iroquois. The tobacco pipes discovered there in 1863 when compared with those unearthed in Nottawasaga and now preserved in our Archæological Department indicate a Petun handicraft.

Horatio Hale, whose familiarity with the Huron-Iroquois dialects constitutes him an authority, tells us that the language of the Petuns was the parent tongue of the Huron and Iroquois. (Hale, "Indian Migration," page 33.)

This statement gives us more than a hint that the Petuns were the primitive stock from which sprang all the tribes speaking the generic language. If, as the ethnologist Mooney contends, tradition and history alike point to the St. Lawrence region as the early home of the Hurons, then we are free to assume that the Tionnontates were the last of the Hurons to move west and south. They were

probably moving by easy stages towards the west to join their countrymen when Cartier met them at Montreal. They probably took the Ottawa route as they were the last to break camp down by the sea, they were also probably the last to enter the west, where they settled in the county of Simcoe near the grounds of their kinsmen, the Ouendats or Hurons. They were not long in possession of their new lands when according to the Relations of 1640, they attacked or were attacked by the Ouendats. They then moved further north into the Bruce Peninsula, and parts of Grey County, where they were when Champlain and Le Caron visited them in 1616. We now enter upon a time when henceforth the Canadian tribes will find historians. We will begin to know the important events of their lives from the faithful reports of men living, observing and writing at the time these events happened, or within a reasonable and speaking distance of men who dwelt among them and orally recorded what they saw or heard.

"The country of the Petuns, previous to their last war with the Mascoutens, extended as far west as the mouth of the Saugeen and as far north as the township of St. Edmonds and Lindsay." (Fr. Jones "Huronian," p. 219.) From these lands the Tionnontates waged a bloody and ruthless war with the Mascoutens, called by the French "The Nation of Fire." The Mascoutens were a powerful Algonquin-tribe dwelling in lower Michigan, or according to Sagard, nine or ten days' journey west of the southern end of Georgian Bay. (H. du Canada, p. 194, 1886.) Conquered by the enemy the Tionnontates fled to the protection of their Huron kinsmen and were permitted to occupy lands in parts of Grey and Simcoe Counties, known to-day as the region of the Blue Hills in Mulmur and Nottawasaga Townships. In these lands they were settled when the Jesuit Fathers opened missions among them and reported a population of about fifteen thousand (Rel. 1640). They were called Petuns and Petuneux by the French because of their abundant and well cultivated fields of tobacco. Petun was their word for tobacco and the French found the word more easily pronounced than Khiontateronon their proper name. "To the west," writes Bressani in his history, "live the tribes which we call the Nation of Petuns, because they raised abundant crops of tobacco to which the savages give the name of Petun." (Martin, Ed. p. 13.)

The word Petun we are told by the Bureau of American Ethnology is of Tupi origin and is still found among the dialects of that tribe in Brazil. The word clung to the plant and followed its migrations from the distant south to the shores of the Georgian Bay. Possibly in the remote past, the northern Indians in their wanderings from southern lands—for their colour indicates a southern origin—may have brought the name and the seeds of the plant with them. Among the Petuns, as among the other Huron-Iroquois tribes, tobacco bore a sacred character. It was used in their ceremonial rites and in the opening of treaties among themselves or among other nations. It was ceremonially utilized in the curing of certain diseases; it was smoked to propitiate the Manitous or Oki haunting dangerous places; to ward off evil and invite good luck. The plant when gathered by the Petuns and intended for home consumption was carefully dried, was then broken into small pieces or pulverized and preserved in deer skin pouches, often elaborately brocaded and ornamented.

FLIGHT OF THE TIONNONTATES.

The defeat of the Hurons by the Iroquois and the indiscriminate slaughter of the men, women and children of their own town Etharita broke the courage of the Petuns. For the next fifty years their history is a pitiful record of intense sufferings, of defeats, of famine and flight from pursuing enemies. The reverses

sustained by the tribe, the gloomy forest through which it opened a path, the foe ever doggedly hanging to its skirts, and the hardships that became a part of its very existence, invest its exodus with melancholy interest. Joined by a remnant of Hurons, who had fled to them for refuge, the Petuns abandoned their country and by weary wanderings over land and water at last found shelter (1652) at Mackinaw, the Michilimackinac of the Algonquins. The Iroquois with the scent and pertinacity of hounds followed them and forced them to take refuge on Noquet Island near Green Bay, Wisconsin, where the Jesuit Fathers had established among the Potawatomi the mission of St. Michael. Their stay here was limited to a few months. By the "Journal des P.P. Jesuits," we are informed that in 1653 they were with the Algonquins and wintered at Teantonrai, an Algonquin village seventy or eighty miles south of Sault Sainte Marie. Late in the same year they were joined by a fugitive band of *Neutrals* and formed an alliance with the Ottawas, the *Cheveux Relevés*—"Standing Hairs"—of Champlain's time who were driven north by the Iroquois. (Note No. 1.) In 1659 Radisson, trader and voyageur, tells us he met them in the marsh lands near the source of the Chippewa River, Wisconsin, and that they were miserably poor. (Note No. 2.)

With the Ottawas the Petuns now roamed into the territory of the Dacotahs; driven from here after a stubborn fight they retreated to the head waters of the Black River, a tributary of the Mississippi. Hearing that the Jesuit missionary, Father Menard, was at Keweenaw Bay, they sent messengers, July, 1661, imploring his help in their misery. The generous priest answered their appeal and perished of hunger in the forests when on his way to the Black River. Leaving the Black River, the Petuns and Ottawas, threatened with starvation, finally arrived at Chegoimegon (now Bayfield, Wis.) where the Jesuit priest Claude Allouez came to their assistance and gave to their village the name of "La Pointe du Saint Esprit." With the Ottawas the Petuns now organized an expedition against their neighbors, the Sioux of the east. Perrot in his "Memoire," p. 88, tells an extraordinary story of the capture and defeat of the Petuns. It appears that the particular abode of the Sioux was surrounded by lakelets and marshes, where wild rice grew everywhere four or five feet above the water. On one of the islands the Ottawas and Petuns entrenched themselves and prepared an attack on the enemy.

The Sioux, to the number of three thousand, surrounded the island. Their numbers overawed the one hundred Petun and Ottawa warriors, who determined to escape in the darkness of the night. The rice fields favored their flight, but the Sioux anticipating their intent stretched nets with little bells attached from islet to islet. When the Petuns and Ottawas began to make their escape through the rice fields, the nets held them, the bells rang and the tomahawks of the Sioux did the rest. They were all killed or captured; one man only, who was called "The Frog" made his escape.

Discontented with their life at Chegoimegan and fearing reprisals on the part of the Sioux, the Petuns or Tionnontates, as they were now called, returned to the Island of Mackinaw.

With the Ottawas who followed them to Mackinaw they formed an alliance with the Potawatomies and the Algonquin tribes of Sauk and Foxes and renewed their war on the Sioux. After a disastrous campaign they returned to Mackinaw

NOTE NO. 1.—"The Hurons and the Ottawas formed an alliance with one another in order to oppose with one accord the fury of the Iroquois, their sworn enemy." Hennepin-Louisiana, p. 101.

NOTE NO. 2.—"He calls them by their tribal name, Kionontateronons ('Okhionontatehron. Rel. 1635-1640)." "Voyages," Pierre Esprit Radisson, 1652-84, p. 147.

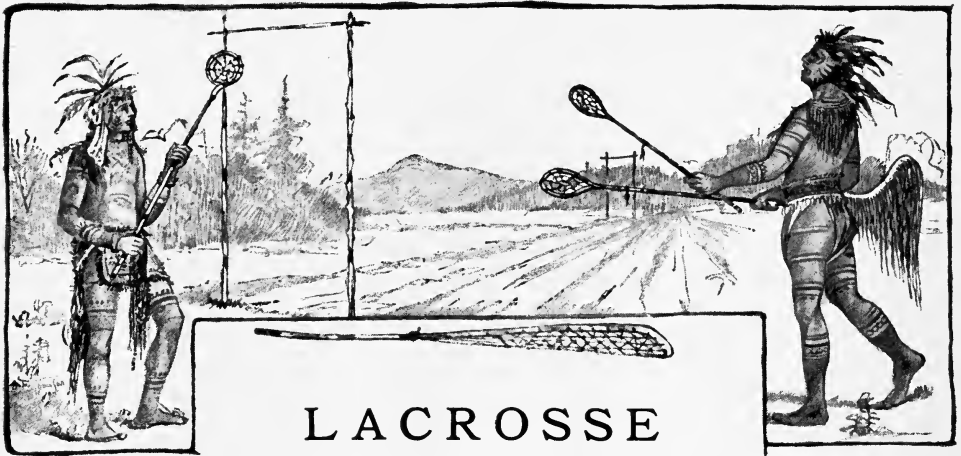
Island, then moved to the mainland, where they built the fort and village from which Marquette and Joliet set out for the discovery of the Mississippi, May 17, 1673. From the year 1690 until their removal to Kansas the Petuns or Tionnontates became known in documentary history as Wyandots. They broke up into fragmentary divisions and these divisions are hard to follow. With the exception of twenty-five members, the Petuns removed from Mackinaw to Detroit in 1702 on the invitation of De Le Mothe-Cadillac. From Detroit a band of them crossed the river and settled at Sandwich; another band went to Sandusky (1751) where they increased in numbers and according to Charlevoix, became the leading tribe of the Ohio region, and the privileged fire lighters of the confederated tribes. Father Emanuel Crespel, who was Chaplain to De Ligneris at Fort Niagara, tells us that in 1728 he went as chaplain with four hundred soldiers on an expedition against the Ottogamis or the Renards (Foxes) and that the French soldiers were accompanied by Huron-Petuns, Nipissings and Ottawas to the number of eight hundred. (P. Manuel Crespel "Voyages" p. 39, Frankfort, 1742.)

Many of the Petun warriors from the Detroit band were present at the great treaty of 1761, when Sir William Johnson made an alliance with the tribes which turned their tomahawks against the "American Rebels." The Sandusky-Petuns, who formed the overwhelming majority of the tribe, refused to enter into the alliance. Many of the Detroit and Sandwich Petuns became incorporated with the Iroquois and lost their tribal identity. In 1842 all the Petuns in the United States territory were rounded up and settled on a reservation in the State of Kansas.

In 1892 they were removed in a body to the Indian Reservation, Oklahoma, U.S., where they now remain, numbering, according to the last census, three hundred and sixty-eight souls. In all their wanderings and reverses they retained, and still retain, their tribal identity and their hereditary Chieftancy.

Briefly then, the Petuns flying from the vengeance of the Iroquois sought protection from the Algonquins of Michilimackinac. Driven from here by the Mohawks and the Senecas they fled to Green Bay, Wisconsin; from here they went to Teantorai; then to the lands around Lake Pepin, intruding on the Sioux hunting grounds. Driven from here they found shelter at Chegoimegan, Wis. In time the main body returned to Mackinaw and a band of them sailed to Manitoulin Island, rejoining in a few months the Mackinaw party. Leaving Mackinaw they descended to Detroit: then they are found in scattered bands at Niagara, Sandwich and other places. The tribe as a body now settled at Sandusky, from which place they were removed by the United States Government to the Kansas reservation and finally to the Indian Territory, now the State of Oklahoma, where with the remnants of five other tribes they are protected and partially supported by the United States Indian Department.

NOTE.—Parkman states in his "Oregon Trail," page 4, that he met a party of Wyandots, when on his way to Fort Laramie in 1846, dressed like white men.



“BAGGATIWAY” or “LE JEU DE LA CROSSE”

Lacrosse, now a favorite game among the athletes of many countries, and long adopted as the national game in our own fair Canada originated with the aborigines of North America. They played the game when our Druid ancestors at Stonehenge on Salisbury Plains were performing their religious rites (serpent worship) in their ancient temple, the ruins of which still remain. On these same plains our Canadian soldiers are now bivouacked.

Nor is there lacking the strong probability it was played long ago in Europe. For Mahaffy, in his “Old Greek Education” (p. 18), has recorded: “As if to make the anticipations of our games more curiously complete, there is cited from the history of Manuel, by the Byzantine Cinnamus (A.D. 1200), a clear description of the Canadian lacrosse, a sort of hockey played with rackets; Certain youths, divided equally, leave in a level place, which they have before prepared and measured, a ball made of leather, about the size of an apple, and rush at it, as if it were a prize lying in the middle, from their fixed starting-point (a goal). Each of them has in his right hand a racket (*ράβδον*), of suitable length, ending in a sort of flat bend, a middle of which is occupied by gut strings dried by seasoning, and plaited together in net fashion. Each side strives to be the first to bring it to the opposite end of the ground from that allotted to them. Whenever the ball is driven by the *ράβδοι* (rackets) to the end of the ground, it counts as a victory.”

He adds in a footnote: “I do not know whether so late an authority is valid proof for the early Greek origin of a game. Most certainly the polo played at Constantinople at the same time came from an equestrian people, and not from the Greeks.”

Nicolas Perrot, the most noted of the Canadian *coureurs de bois*, spent most of his life among the western tribes. In 1665 little more than half a century after the founding of Quebec we find him living among the Indians and in his *Memoire* written some time later he gives one of the early descriptions of this game. Lacrosse was played by the various tribes of the North American Continent from the Athabascian regions of the North to the Gulf of Mexico on the south, and from the Atlantic to the Pacific; and played with all the enthusiasm and “Esprit de Cœur” characteristic of the pre-Columbian races. The game was played with variously shaped sticks—some resembling the modern tennis racket, others with a long handle

curved at the top somewhat resembling the modern lacrosse stick—others were made with a small round curve at the end of the stick. All these were laced with deer thongs or other material of fibre.

In the south a long stick was doubled upon itself, the lower part being laced like our ordinary rackets. The conformation of these crosse sticks varied very much amongst the numerous tribes. From the circular racket at the end of the stick to those resembling our modern lacrosse sticks we find every variety.

The balls used varied in material. The commonest was a wood knot, covered with buckskin; but other balls were made of burned clay, hair, fibre, bone or stone, and covered in such a way as to be most serviceable. The game is distinctly a man's game, as opposed to shinny and double ball which were commonly played by the women. Among the Tionnontates, however, lacrosse is recorded by the Jesuit Missionaries as being played as a remedy for sickness. Lacrosse was played during spring, summer and fall; and usually the players painted and adorned themselves in their most approved style. The game generally began in the afternoon and was usually followed by a dance at night accompanied by a feast.

Previously to a match the players would go through a course of bathing, fasting, and emetics. The contending parties all carried some charm to insure their victory. Shamans were hired by individual players to exert their supernatural powers not only for themselves but also on behalf of their side, and when a noted wizard openly espoused the cause of one of the parties, the players of the other side felt a certain extent disheartened.

Like all other games of the Indians, lacrosse was to the spectators a favorite opportunity for betting, and many would wager and lose all their possessions. There can be no doubt that though the game of lacrosse may have been modified in historic times, it still remains an invention of our aborigines even to the betting upon the game.

Morgan in his "League of the Iroquois" in describing this ball play says: "This game reaches back to a remote antiquity, was universal among the red races and was played with a degree of zeal and enthusiasm which would scarcely be credited.

Baron La Hontan in "New Voyages to North America" (1703) states: "They have a third play with a ball not unlike our tennis, but the balls are very large, and the rackets resemble ours, save that the handle is at least three feet long. The savages, who commonly play at it in large companies of three or four hundred at a time, fix two sticks at 500 or 600 paces distant from each other. They divide into two equal parties, and toss up the ball about halfway between the two sticks. Each party endeavours to toss the ball to their side; some run to the ball, and the rest keep at a little distance on both sides to assist on all quarters. In fine, this game is so violent that they tear their skins and break their legs very often in striving to raise the ball. All these games are made only for feasts or other trifling entertainments; for 'tis to be observed that as they hate money, so they never put it in the balance, and one may say interest is never the occasion of debates among them."

James Adair in his "History of the American Indians" (1775) describes ball playing as their chief and most favorite game; and it is such severe exercise, as to show it was originally calculated for a hardy and expert race of people like themselves, and the ancient Spartans. The ball is made of a piece of scraped deer-skin, moistened and stuffed hard with deer's hair, and strongly sewed with deer's sinews. The ball-sticks are two feet long, and the lower end somewhat resembling the palm of a hand, and which are worked with deer-skin thongs.

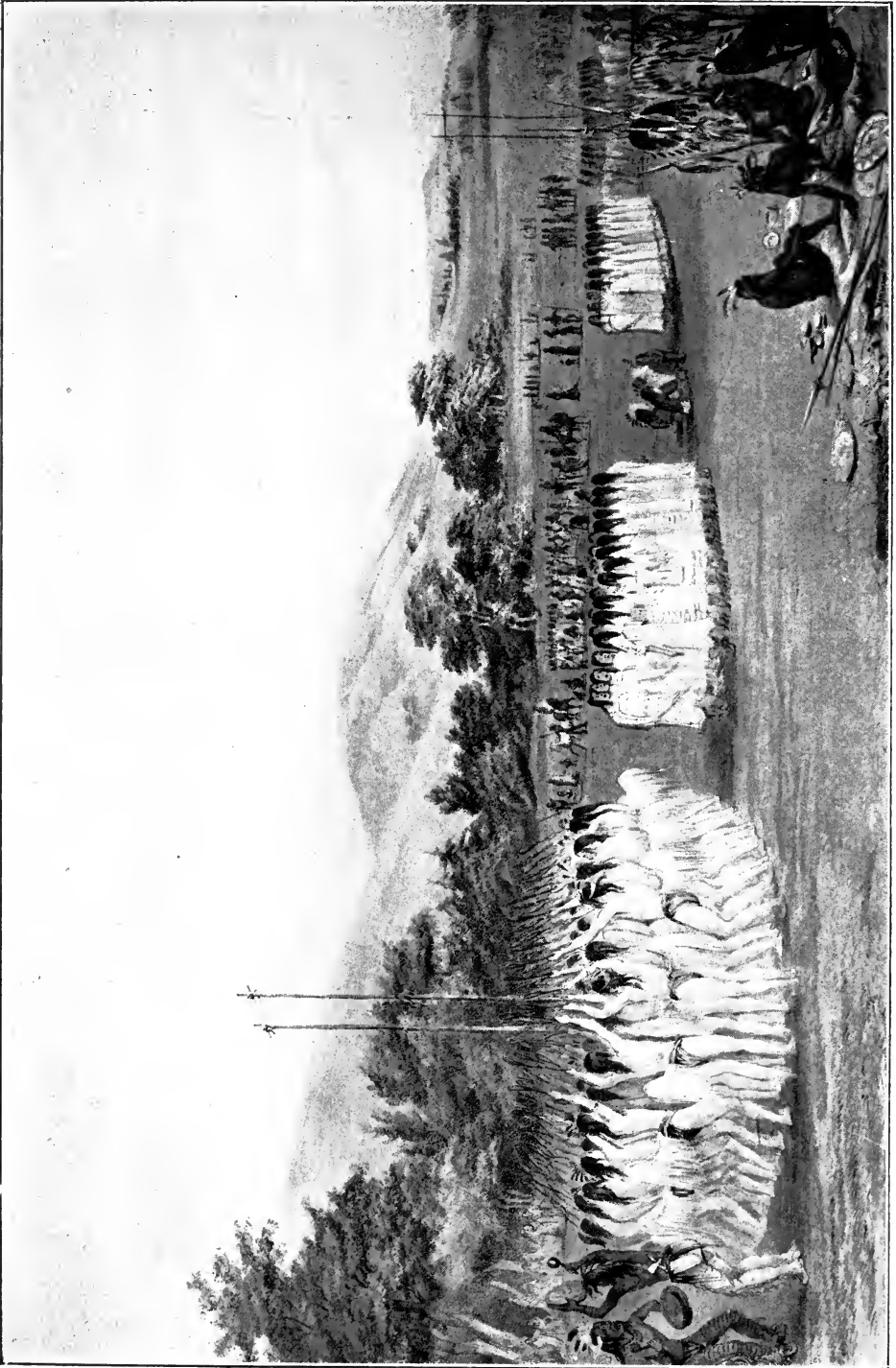
Between these, they catch the ball and throw it a great distance, when not prevented by some of the opposite party, who try to intercept them. The goal is about 500 yards in length; at each end of it, they fix two long bending poles into the ground, 3 yards apart below, but slanting a considerable way outward. The party that happens to throw the ball over these counts 1; but if it be thrown underneath, it is cast back, and played for as usual.

Alexander Henry in his "Travels and Adventures in Canada, 1809" states that "Baggatiway, called by the Canadians *le jeu de la crosse*, was played with a bat and ball. The bat was about 4 feet in length, curved, and terminating in a sort of racket. Two posts were planted in the ground at a considerable distance from each other, as a mile or more. Each party had its post, and the game consisted in throwing the ball up to the post of the adversary. The ball, at the beginning, is placed in the middle of the course, and each party endeavors as well to throw the ball out of the direction of its own post as into that of the adversary's." Henry also describes a ball game played by the Chippewa and Saukies on the King's birthday (June 4), 1763, at Fort Michilimackinac, through which, by strategy, that fort was taken.

T. G. Kohl in his "Wanderings Round Lake Superior" gives a very fine description of the game. He says: "Of all the Indian social sports the finest and grandest is the ball play. I might call it a noble game and I am surprised how these savages attained such perfection in it. Nowhere in the world, excepting, perhaps, among the English and some of the Italian races, is the graceful and manly game of ball played so passionately and on so large a scale. They often play village against village, or tribe against tribe. Hundreds of players assemble, and the wares and goods offered as prizes often reach a value of a thousand dollars or more. On our island we made a vain attempt to get up a game, for though the chiefs were ready enough, and all were cutting their raquets and balls in the bushes, the chief American authorities forbade this innocent amusement. Hence, on this occasion, I was only enabled to inspect the instruments. They were made with great care and well adapted for the purpose, and it is to be desired that the Indians would display the same attention to more important matters.

"The raquets are $2\frac{1}{2}$ feet in length, carved very gracefully out of a white tough wood (hickory) and provided with a handle. The upper end is formed into a ring, 4 or 5 inches in diameter, worked very firmly and regularly, and covered by a network of leather bands. The balls are made of white willow, and cut perfectly round with the hand; crosses, stars and circles are carved upon them. The care devoted to the balls is sufficient to show how highly they estimate the game. The French call it '*jeu de crosse*.' Great ball players, who can send the ball so high that it is out of sight, attain the same renown among the Indians as celebrated runners, hunters, or warriors."

Charlevoix in his work "Journal d'un Voyage dans l'Amerique Septentrionale, Paris, 1744," says, referring to lacrosse: "It is played with a ball, and with two staffs recurved and terminated by a sort of racket. Two posts are set up, which serve as bounds, and which are distant from each other in proportion to the number of players. For instance, if there are eighty of these, there will be a half league between the posts. The players are divided into two bands, each having its own posts; and it is a question of driving the ball as far as the post of the opposing party without falling upon the ground or being touched with the hand. If either of these happens the game is lost, unless he who has committed the mistake repairs it by driving the ball with one stroke to the bound, which is often impossible. These savages are so adroit in catching the ball with their crosses that these games sometimes last several days in succession."



LACROSSE DANCE (*Catlin.*)

Mrs. W. W. Brown in the "Transactions of the Royal Society of Canada" most tersely describes the game as follows: "E-bes-quā-mo'gan, or game of ball, seems to have been the most popular and universal of the outdoor games, and played by all North American tribes. Their legends are more or less indebted to it. Tradition gives it a prominent place in their wonderful mythology. The Aurora Borealis is supposed to be Wa-ba-banal playing ball. Among the Wabanaki it was played by women as well as men, but, with few exceptions, never at the same time and place, as hunters and warriors played ball to gain muscular power, to stimulate their prowess and to augment their fleetness of foot.

"The players formed in a circle, proportionate to the number engaged in the game. Each held a stick called e-bes-quā-mo'gan-a-tok. This was made of some flexible wood, about 3 feet in length, crooked to three-fourths of a circle at one end, which was interwoven with stripes of hide after the manner of snowshoes. One man was detached to stand in the centre and on his throwing into the air a chip, upon which he had spat, each one would cry, 'I'll take the dry' or 'I'll take the wet' thus forming opposite factions. The side of the chip which fell uppermost decided which party should commence play. The ball was never touched with the hand, but thrown and kept in motion by the e-bes-quā-mo'gan-a-tok. The goals were two rings or holes dug in the ground, the distance of the circle of players apart. The game consisted of getting the ball into opponent's goal, and regard for neither life nor limb was allowed to stand in the way of possible success."

Schoolcraft states that "the game usually commences by one of the old men throwing the ball in the air, when all rush forward to catch it in their ball-bats before or after it falls to the ground." He states also that the ball is carved from a knot of wood, or made of baked clay covered with rawhide of the deer. The ball-bat he says is from three to four feet long, one end bent up in a circular form of about four inches in diameter in which is a network made of rawhide or sinews of the deer or buffalo. He says: "The savages have several kinds of games, in which they take delight. They are naturally so addicted to these that they will give up their food and drink, not only to play but to watch the game. There is among them a certain game, called crosse, which has much likeness to our game of lawn tennis. Their custom in playing it is to oppose tribe to tribe; and if one of these is more numerous than the other, men are drawn from it to render the other equal to it (in strength). You will see them all equipped with the crosse—which is a light club, having at one end a broad flat part that is netted like a (tennis) racket; the ball that they use in playing is of wood, and shaped very nearly like a turkey's egg. Each party has its leader, who makes an address, announcing to his players the hour that has been appointed for beginning the games.

"This exercise has much to do with rendering the savages agile, and ready to ward adroitly any blow from a club in the hands of an enemy, when they find themselves entangled in combat; and if one were not told beforehand that they were playing, one would certainly believe that they were fighting together in the open field."

Long's *Voyages and Travels* amongst the North American Indians during these years describes the game as it appeared to him. "Playing at ball, which is a favorite game, is very fatiguing. The ball is about the size of a cricket ball, made of deer skin, and stuffed with hair; this is driven forwards and backwards with short sticks, about two feet long, and broad at the end like a bat, worked like a racket, but with larger interstices; by this the ball is impelled, and from the elasticity of the racket, which is composed of deers' sinews, is thrown to a great distance; the game is played by two parties, and the contest lies in intercepting

INDIAN LACROSSE GAME (*Contin.*)

each other, and striking the ball into a goal, at the distance of about four hundred yards, at the extremity of which are placed two high poles, about the width of a wicket from each other; the victory consists in driving the ball between the poles. The Indians play with great good humor, and even when one of them happens, in the heat of the game, to strike another with his stick, it is not resented. But these accidents are cautiously avoided, as the violence with which they strike has been known to break an arm or a leg."

Geo. Copway (Kah-ge-ga-gah-bowh) in the history of his own Nation, the Ojibways, gives an excellent description of the game. "One of the most popular games is that of ball-playing, which oftentimes engages an entire village. Parties are formed of from ten to several hundred. Before they commence, those who are to take a part in the play must provide each his share of staking, or things which are set apart; and one leader for each party. Each leader then appoints one of each company to be stake-holder.

"Each man and each woman (women sometimes engaged in the sport) is armed with a stick, one end of which bends somewhat like a small hoop, about four inches in circumference, to which is attached a network of rawhide, two inches deep, just large enough to admit the ball which is to be used on the occasion. Two poles are driven in the ground at a distance of four hundred paces from each other, which serves as goals for the two parties. It is the endeavor of each to take the ball to his hole. The party which carries the ball and strikes its pole wins the game.

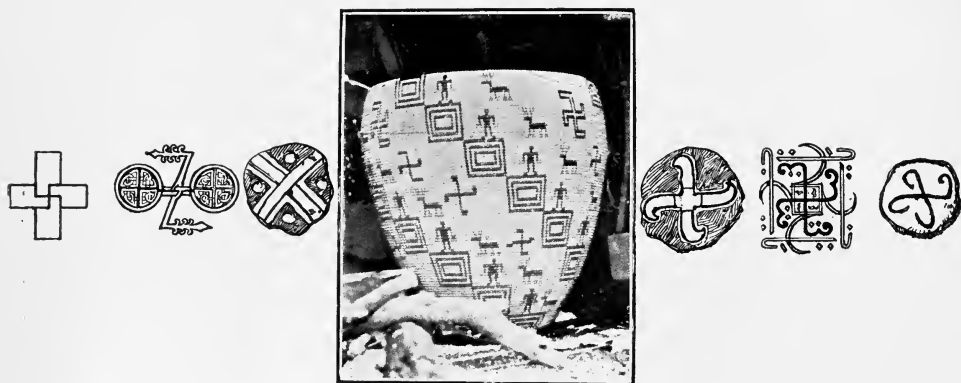
"The warriors, very scantily attired, young and brave, fantastically painted—and women, decorated with feathers, assemble around their commanders, who are generally men swift on the race. They are to take the ball either by running with it or throwing it in the air. As the ball falls in the crowd the excitement begins. The clubs swing and roll from side to side, the players run and shout, fall upon and tread upon each other, and in the struggle some get rather rough treatment.

"When the ball is thrown some distance on each side, the party standing near instantly picks it up, and runs at full speed with three or four after him at full speed. The others send their shouts of encouragement to their own party. 'Ha! ha! yah!' 'A ne-gook!' and these shouts are heard even from the distant lodges, for children and all are deeply interested in the exciting scene. The spoils are not all on which their interest is fixed, but it is directed to the falling and rolling of the crowds over and under each other. The loud and merry shouts of the spectators, who crowd the doors of the wigwams, go forth in one continued peal and testify to their happy state of feeling.

"The players are clothed in fur. They receive blows whose marks are plainly visible after the scuffle. The hands and feet are unincumbered and they exercise them to the extent of their power; and with such dexterity do they strike the ball that it is sent out of sight. Another strikes it on its descent, and for ten minutes at a time the play is so adroitly managed that the ball does not touch the ground.

"No one is heard to complain, though he be bruised severely, or his nose come in close communion with a club. If the last mentioned catastrophe befall him, he is up in a trice, and sends his laugh forth as loud as the rest though it be floated at first on a tide of blood.

"It is very seldom, if ever, that one is seen to be angry because he has been hurt. If he should get so, they would call him a 'coward,' which proves a sufficient check to many evils which might result from many seemingly intended injuries."



THE PRE-CHRISTIAN CROSS

VERY REV. W. R. HARRIS, D.D., LL.D.

In the volume embracing the papers read before the International Congress of Anthropology (Philadelphia, 1893) there is a learned disquisition on "Various Supposed relations between the American and Asiatic races," by that eminent anthropologist, the late Dr. Daniel G. Brinton. After reviewing the reckless statements made by a few writers, who endeavoured to find analogies between the Eskimoan and Ural-Altai races and establish an Asiatic origin for the American Indian, Dr. Brinton continues: "But the inner stronghold of those who defended the Asiatic origin of Mexican and Central-American Civilization is, I am well aware, defended by no such feeble outposts as these, but by a triple line of entrenchment, consisting respectively of the Mexican calendar, the game of Patolli, and the presence of Asiatic Jade in America." In conclusion, he declares that: "Up to the present time there has not been shown a single dialect, not an art or an institution, not a myth or a religious rite, not a domesticated plant or animal, not a tool, weapon, game, or symbol, in use in America at the time of the discovery which had been imported from Asia, or from any other continent of the old world."

I may add that this expression of Dr. Brinton's belief is applauded by many eminent American Antiquaries, who, with him, have now abandoned the search for Egyptian, Babylonian, or Chinese influences underlying the ancient civilization of Central and South America as profitless, if not a waste of time.

But is not Brinton's creed too positive and dogmatic, face to face with the bewildering similarities between the cultures of Asia and America? The great German, Von Humboldt, tells us in his "*Voyages aux regions Equinoxiales du Nouveau Continent*" that he found among the tribes of the Western Continent things and ceremonies similar to what he afterwards saw in parts of Asia. Professor Culin in his paper "*America the Cradle of Asia*" writes: "We find in America things not only similar to those of Asia, but precisely identical with them." He instances as an example the "Straw Game or Indian Cards" played by the Hurons and among tribes from the Atlantic to the Pacific coast, as identical with the Japanese Yeki and the Chinese Yi. Towards the end of his address he makes this startling statement: "The games of the Eastern Continent—and I speak now of what we know of the remote past—are not only similar to, but practi-

cally identical with those of America, and are not only alike in externals, but in their morphology as well.”*

Tentatively we might venture to explain or account for this singular identity by assuming that it was simply accidental, but this assumption can have no standing in the case of other examples cited by Alexander Von Humboldt and Professor Culin. Take for example, the cross, particularly that very ancient and hieratic symbol the Grammata Cross commonly known as the Swastika, the mention of which is so strangely omitted or forgotten by Brinton and Culin.

The symbol which, beyond all others, goes back to the Deluge and, for aught we know to the Garden of Eden, is the cross. Anthropologists and Archaeologists in Europe and America dwell upon its sacredness in many natural religions and have invariably assigned to it a very great antiquity. Nearly all have reverently admitted its origin and symbolic meaning as a great mystery.

In our study of the sacred symbol we will go back to the death of Adam.

THE CROSS OF SETH, SON OF ADAM.

Before we begin the study of the mysterious Swastika and the singular rites with which this hieratic symbol was intimately associated among nearly all ancient nations and among many tribes of the old world and the new, let us deal reverently with the Cross of the Crucifixion, its origin and vicissitudes. There is a strange legend, found in the Sacred Books of the Copts, originating in the apocryphal last Gospel of Nicodemus—a ruler in Israel who visited Jesus when darkness shrouded Jerusalem. The legendary narrative informs us that when Adam lay sick unto death, his son Seth appeared at the entrance to the Garden of Eden and begged of the Angel with the flaming sword for a small cruse of oil from the Tree of Mercy that he might anoint the eyes of his dying father. By the side of the Angel guarding the entrance to Paradise stood a Spirit of radiant beauty who, moved by compassion for the sorrowing Seth, went to the Tree of Mercy and broke off a small branch of this tree, so intimately identified with Adam's fall: “Your father died when you were on your way here,” said the Spirit to Seth, “but return with this branch and plant it at your father's head, and say to Eve, your mother, that when this branch becomes a tree, and is again planted, it will bear one very precious fruit and that when that fruit is taken from the tree, she and Adam will enter into Paradise.”

Seth, returned, opened his father's grave and at the head of Adam planted the branch. In time it grew to be a large and very beautiful tree which was standing and fair to look upon in the reign of the great King Solomon. When Solomon was laying the foundations for his wonderful Temple, he thought of the beautiful tree, and wishing to preserve its wood for all time, ordered it to be cut down and sawed into beams for the Holy Building. The workmen felled the “Tree of Seth,” but, when they began to cut out the beams, their saws made no impression on it, so, worn out by repeated trials, they stealthily carried it away by night and threw it across a stream where it was used as a bridge.

As the Queen of Sheba was on her way to visit Solomon she came to this brook, but when she was about to step upon the tree-bridge, she stopped, drew back, and, moved by a feeling she could not control, fell upon her knees and refused to cross the bridge. Then when, brought by another road, she was received with great honours by the King of the Jews, a divining Spirit entered into her and she

*This scholarly address was published in *Harper's Monthly Magazine*, March, 1903, pp. 534-540.

prophesied that a time would come when the death of One who would be the fruit of the bridge-tree would end for all time the Empire of the Jews.

Solomon, astonished and alarmed by her prediction, ordered the tree to be taken away and buried deep in the earth.

Many years after the death of King Solomon, when the Queen of Sheba and the tree were forgotten, the Jews made, over the ground where the tree was buried, a pond for washing sheep, called afterwards the Probatica, or the Pool of Bethsaida. At once, because of the sacred wood this pool became wonderful. The sick and those suffering from disease bathed in the water, then an Angel breathed upon the pool and, all at once the water began to be troubled, and the first person who entered into it after the Angel had passed over, received renewed health because of the blessing of the Angel and Seth's tree buried beneath.

Now the morning before Judas betrayed our Saviour, this tree of Seth rose to the surface of the water and was seen floating in the pool by a man named Simon, a Cyrenian. This Simon lifted up the tree from the pool and sold it to a carpenter who, the next day, was commanded to make crosses on which three malefactors were, that afternoon, to be crucified. And one of the malefactors was Jesus of Nazareth. Now from the tree of Seth he made one of the crosses, and this cross was the one that our Saviour, assisted by Simon the Cyrenian, carried from Pilate's Court to Calvary and on which He was crucified, the First and Only Fruit it ever bore.

THE CROSS OF JESUS.

We now reach a period when the legendary dissolves into the historic and makes tradition. After the crucifixion, and while the body of Christ lay in the tomb of Joseph of Arimathea and the bodies of the two thieves were thrown into the Gehenna, the common dumping ground, as food for fire or carrion-birds, the three crosses and the instruments of crucifixion—the nails and ropes—were buried in conformity with a long established custom of the Jews.

When Constantine the Great and Maxentius contended for the Imperial Crown, Constantine worn with fatigue entered his tent one afternoon and sought repose. While he slept he dreamt that an Angel came to his cot, and, placing a hand upon his head, told him to look up. Then the silken covering of the tent disappeared and the Emperor saw a great and luminous cross in the heavens and, immediately over it, in large letters of burnished gold was the inscription: "By this sign thou shalt conquer." Late that night he again saw in a dream the luminous cross and then Christ appeared to him and told him to carry a figure of the cross on his banner and standards.

Constantine summoned his captains to a consultation and made known the vision. The pagan Emperor and his pagan generals agreed that the dream was of happy omen, and that the voice of the Angel and the apparition of the mysterious Jew meant the friendship and aid of a strange god. The following day, on the Imperial Banner, the cross was blazoned and to the Imperial Standard was given the name "Labarum—the Gift of God." When Constantine met the troops of Maxentius at the Milvan Bridge he won a great victory. His soldiers, though nearly all pagans, went into battle carrying the monogram of Christ on their shields. This battle which was fought October 28, 312, led to the conversion to Christianity of Constantine and his mother, and to the downfall of Paganism as the national faith of Rome.

After defeating Licinius in a pitched battle on the plains of Italy, Constantine returned to Rome and issued his famous "Edict of Tolerance," proclaiming



TAU CROSS.
From the Tridentine Missal.

freedom of worship. Hearing that it was the custom of the Jews to bury the wood on which the condemned were crucified, Constantine asked his mother Helena to go with an Imperial retinue to Jerusalem and find, if possible, the cross on which Jesus Christ was crucified. Helena, then eighty years of age, went to Jerusalem and began her search for the true cross. While excavating at "Golgotha—the Place of Skulls"—the diggers came upon the three crosses, but the title board bearing the inscription "Jesus of Nazareth, King of the Jews" was lying at a distance from the crosses and no one could tell to which one of the three it belonged. Macarius, a Christian Bishop, who was standing near, caused the three crosses to be carried, one after the other, to the bedside of a worthy woman who was at the



RUINS OF TEOTIHUACAN.

point of death. The woman by the advice of Macarius placed her hand on each of the crosses, and when she touched that on which Christ was crucified, she was immediately restored to health.

After a time Constantine and his mother erected a magnificent Basilica over the Holy Sepulchre which was destroyed by the Turks in the 13th Century.

This then is the tradition handed down to us from the early centuries. It may or may not be true.

BIRTH OF THE CROSS.

Let us now, before we deal with the Swastika and the commanding symbolism of the cross among the very remote nations of antiquity, glance at the position the cross fills in the Bible, and possibly, trace the origin and the conspicuous position it occupies in the iconography (i.e. images, pictures, etc., of ancient arts and religions) of the early races in the old world and in the new.

In the second chapter of Genesis, verse 10, we read: "And a river went out of the place of pleasure to water Paradise, which from thence is divided into four heads;" which means that the river with its tributaries flowed towards the cardinal points, or east, west, north and south. Here we have the cross. From the time of Adam, who lived one hundred and thirty years, the tradition of the locality of paradise and its four rivers, crossing at right angles, would remain in the memory of his scattered descendants. From them it would be transmitted to their successors, who, forgetting the patriarchal religion of Adam and inventing new forms of worship, would yet retain the traditions of Adamic days though in a mutilated and fragmentary form.

They associated the rivers with fertility and abundance, and, as they now had "fashioned gods unto themselves," they quite naturally gave to the god of fertility and of water the symbol of the four rivers of paradise. In the twelfth chapter of Exodus we read: "And take the blood (of the lamb) and mark the upper door posts of the houses and the lintels." This instruction is given as a command to Moses by an Angel with the voice and in the Name of God, and by Moses delivered to the Chosen People the night before the Angel of Death strikes the first-born "in the land of Egypt both of man and beast." St. Jerome in his dissertation on the 97th Psalm, contends that the mark of blood on the door posts of the enslaved children of Israel took the form of a cross, thus **T**, the Hebrew Tau, and he is probably right, for as the lamb symbolised our Saviour—the Lamb of God—and the blood, His blood, it was fitting that the cross on which He was to be crucified should appear and establish the symbolic unity of the Triune God.*

Once more, and for the last time before the real cross, the Cross of Jesus Christ, is raised aloft for the Redemption of the human race, the symbol of the cross confronts us in Holy Writ. It is worthy of remark that in this instance, as in the case of the redeemed Israelites, the cross is intimately associated with blood and mercy. This is what we read in the ninth Chapter of Ezekiel, fourth verse: "Go through the midst of the City (God is commanding His Destroying Angel) through the midst of Jerusalem and mark Tau—**T**—upon the foreheads of the men that sigh and mourn." By the mark of the cross on their foreheads the Angel knew those who suffered and passed them with a benediction.

THE CROSS OF TEOTIHUACAN.

Twenty-seven miles south-east from the City of Mexico, on the way to the sea, are the ruins of an ancient Toltec city covering an area of about two miles. Very

*Our Saviour was crucified on a Tau-T-Cross. The small headpiece bearing the inscription, "Jesus of Nazareth, King of the Jews," was nailed to the transverse beam of the Tau, thus forming what is now called the Latin Cross, thus **+**. Death by the cross was common among the Syrians, Egyptians, Persians, Greeks, Romans and Jews. Pharaoh's chief baker was beheaded and his body fastened to a cross (Gen. xl: 19). Haman prepared a great cross on which to hang Mordecai (Esth. vii: 10). The Jews do not admit that they crucified living men. They contend that they first put them to death, and then fastened them to the cross by the neck or the hands. But though there are many examples of men thus hung on the cross after death, there are indisputable proofs of living crucifixions in their history. The worshippers of Baal-Peor (Numb. xxv: 4) and the King of Ai (Josh. vii: 22) were hung on the cross alive. Alexander Jannaeus, King and High Priest of Jerusalem, seventy years before the Christian Era, crucified eight hundred of his rebellious subjects at a great entertainment organized for his friends. The seven sons of Saul were also crucified, while alive, by the Gideonites, and this was done by permission of King David (2 Sam. xx: 9). The three hundred citizens of Tyre crucified on the seashore by order of Alexander the Great were nailed to the "Cross Ansata or Phalloid." The Macedonian general ordered the crucifixion by the Phalloid to show his contempt for a people who were given to phallic worship.

near these ruins is the quaint village or mission of San Juan de Teotihuacan which, at once, offers to the antiquary two of the most remarkable examples of Toltec remains in stone yet found in the Republic of Mexico.

When, in 1519, Cortes, with his mailed company of heroic fighters, on his way to the conquest of Mexico, passed this heap of ruins, more than one thousand years had expired since the foundations of the ancient city were laid.

Around the walls of this capital of a very old and half-civilized empire the two oldest civilizations of America, the Quiché from the south and the Nahoé from the north, met and united. Here are the famous and very curious pyramids of the Sun and the Moon. They rise from the banks of the little river of Teotihuacan. Here also is the Street of the Dead, and here—cut from a single block of stone—was found, not long ago, the cross of Teotihuacan, now in the National Museum, Mexico City. We will return to it, but let it rest for the present.

UNIVERSALITY OF THE CROSS IN ANCIENT TIMES.

In Egypt, in the days of the Pharaohs, the cross figured on the gigantic statue of the god Serapis, which, three centuries before the Christian Era, was transported by order of Ptolemy Soter to Sinape on the southern shore of the Black Sea. Six centuries after the death of Soter, this Egyptian idol with its cross was destroyed by the soldiers of the Emperor Theodosius, against the pleadings of the priests of Isis and Sorosis to spare the cross, the emblem of their god and of generations yet unborn.

Among the Phœnicians, the Tyrians, the Carthagenians and Sidonians, the cross occupied a conspicuous place in iconography, that is in their ancient religious art, as represented by symbols, images and mural sculpture.

With the serpent it was a central object of reverence among nearly all ancient races. It is figured on the Phœnician coins found among the ruins of Trocadero. It was found, wonderfully sculptured and embellished, in the sand-buried Nineveh. Rollin, in his history of ancient peoples, says that Alexander the Great, when he reduced, and entered with his soldiers, the city of Tyre, crucified on the sea shore three hundred of its noblest citizens, and "this the Macedonian did," writes Plutarch, "to show his contempt for the cross, which they worshipped."

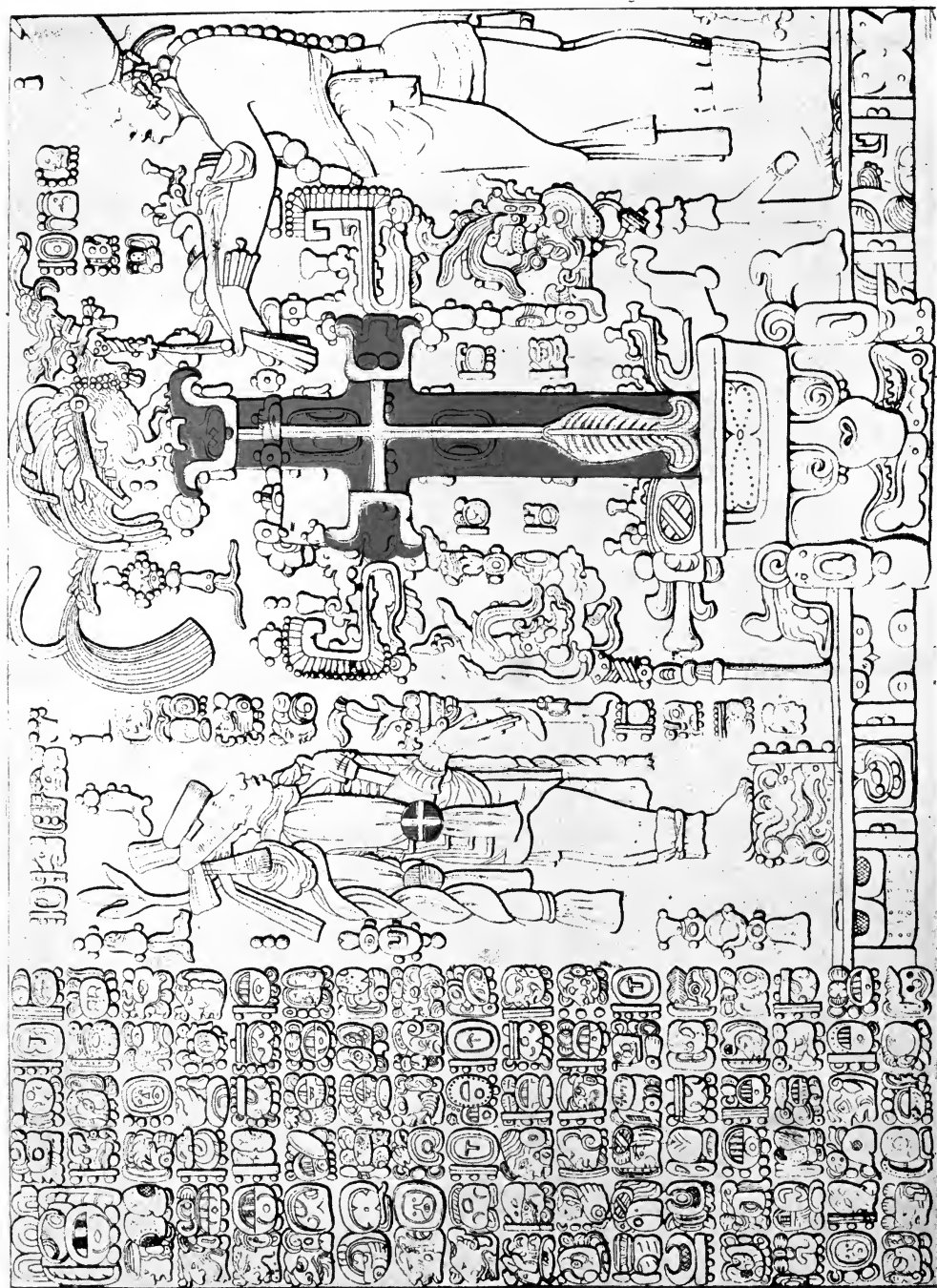
The Phœnician "Temple of Gigantica" was built in the form of a cross.

In India it was the symbol of Buddha and was cut by the Brahmins into the walls of the Cave of Elephanta, one thousand years before the Redemption. It is seen to-day in India in the hands of the statue of Siva, Brahma and Vishnu. Among the Gauls, in Caesar's time, it was the sign of their water god, and the Druids used it in their religious ceremonies.

THE CROSS IN ANCIENT AMERICA.

When the Spanish missionaries learned, soon after the discovery of America, that the cross was worshipped in Mexico and Central America they did not know whether they ought to account for its existence and adoration among these strange people to the pious zeal of St. Thomas, the Apostle of the Indies, or to the sac-religious subtlety of Satan.

Sahagun in his "*Cronica de Neuva Espana*" informs us that the cross was an object of worship in the great temple of Cosumel, Yucatan. He writes: "At the foot of the tower of the temple, there was an enclosure of stone work, graceful and turreted; and in the middle was a cross ten palmos high. This they held and adored as (the symbol of) the god of rain." (Lib. I, C. 2.)



The Palenque Cross and Hieratic Writing; in Mexico National Museum.

In 1878, the French anthropologist Désiré Charney discovered an abandoned and ruined city in the country of the Lacandonas, Chiapas. By a strange coincidence Charney met here the English explorer, Mr. Alfred Maudsley and his companions. This newly discovered ruin is supposed to be the Phantom City of Stephens. This phantom city, according to Charney in his "Ancient Cities of the New World," (Chap. 22), stands on the left bank of the Larganitos River, in a region hitherto unexplored between Guatemala, Quezaltenago and Chiapas.

Among the strange things discovered in the great ruin, Charney tells us of a bas-relief which he describes in his book, and from which we quote: "It fills the central door of the temple and is 3ft. 6 in. long by 2 ft. 10 in. wide. Two figures with retreating foreheads form the main subject, having the usual head-dress of feathers, cape, collar, medallion and maxtli. The taller of these two figures holds in each hand a large cross, while the other bears but one in his right hand. Rosettes end the arms of the crosses, a symbolic bird crowns the upper portion, while twenty-three Katunes are scattered about the bas-relief. We think this a symbolic representation of Tlaloc, the Maya god of rain, whose chief attribute was a cross."

Charney, in his deeply interesting work, presents drawings of crosses found in the pre-Toltec city of Mitla, Mexico, at Mayapan, Yucatan, and indeed of crosses found all over the land from the Southern Guatemala to Northern Mexico.

Everywhere, even to-day, may be seen diversified forms of the cross, more or less artistically delineated on the walls of the temples, on ancient buildings, on galleries and natural rocks, in caves and on vases and pottery dug from the soil.

In the pre-Columbian city of Palenque, Chiapas, there dominates the forest shrouded ruins a remarkable building, known to American antiquaries as the Temple of the Cross. This structure bears a striking resemblance, in its dilapidation, to an early Italian temple and, in age, probably antedates by many years the Roman Coliseum.

The floors of the corridors and of many of the rooms are laid in cement as hard as the best seen in the remains of Roman buildings. The walls are about ten feet high and some carry the Greek cross + while others bear the Hebrew or Egyptian T. These crosses have occasioned much learned speculation.

In the inner sanctuary of this temple was found in 1783 a wonderful tablet in stone, now in the National Museum, Mexico City. It is called popularly the "Palenque Cross" and, archæologically, "La Cruz Enramada de Palenque." It is eleven feet wide by six feet high. It deserves to be examined closely. The man standing to the right of the cross and holding aloft a newly born babe is the god of fecundity returning thanks to Votan, the Jupiter of the Mayas, for driving from the land the evil spirit of sterility. The opposite figure represents Hunaphue, one of the gods, who serves and ministers to the supreme god Votan. On his scarf is the transverse cross, emblematic of fertility among the Quichés, the Mayas, and of all the semi-civilized or civilized races of Mexico and Central America long before the coming of the Spaniard. It was also, among the Egyptians the symbol of the equinoxes or times of rain. The bird perched upon the cross is the Cuevite or Roval Quetzal, sacred to the sun. The hieroglyphics on the left of the tablet, among them the Tau, have not to this day been deciphered. If we could read them they, perhaps, would explain the full meaning of the representation and might furnish a clue to all the hieroglyphics on the ancient monuments of Mexico and Central America.

This tablet of the cross, with its mysterious figures and symbolic writing, has led to more learned speculation than any other relic—the "Calendar Stone" alone

excepted—found in the vast regions of Mexico and Yucatan. The French military explorer, Capt. Dupaix (1807) and his commentators believe Palenque belongs to a very remote antiquity and antedates by many years the Christian Era. He accounts for the appearance of the cross among these ancient Americans on the



STATUE OF HUNAPHUE. PALENQUE.

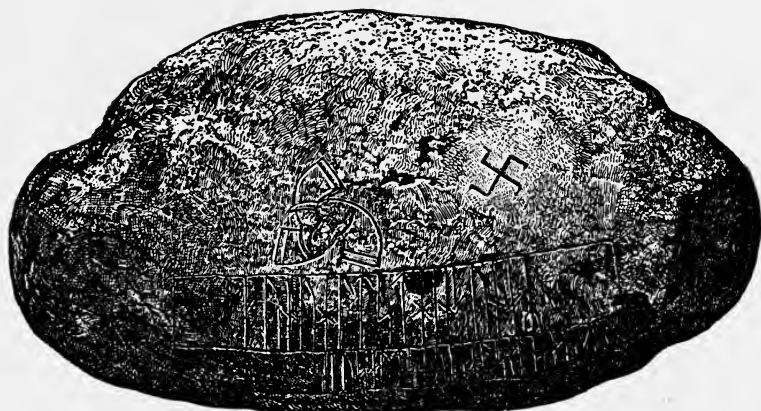
assumption that it was known and had a symbolic meaning among pre-Christian nations long before it was established as the emblem of Christianity.

Desire Charney mentions another tablet of the cross found also at Palenque, one panel of which is now in the Smithsonian Institute, Washington.

The English archæologist, Alfred Maudsley, who, in 1879, explored the ruins of Palenque, agrees with Charney when he states: "That it was a cherished symbol among nearly all ancient races in Asia and America thousands of years before it was accepted as the symbol of the Christian Faith at the time of Constantine."

Conceding his contention to be true, we are then brought face to face with a problem of serious import, and that is: What did the cross stand for, or what did it symbolize to those ancient peoples and those lost civilizations?

Without, in any way, compromising my independence of thought, or identifying myself with any party, I am free to state what, in my opinion, the pre-Columbian cross in America symbolized in the religious lives of the Mexicans and Mayas. From the dim traditions which yet linger among the tribes of Central America, from the civilized Indians, and from conversations held with the priests ministering to these Indians, I am satisfied that the cross was the symbol of the god of rain, of water, and fertility. I refer now to what we call the Greek cross + and not to the Swastika with which I will presently deal. The Mexican astronomer, Pelagio Gama, is of the opinion that the "Cross of Teotihuacan" served for an astronomical expression of the vernal and autumnal equinoxes when days and nights are of the same length; the times, March 21st and September 22, when the sun in its revolution stops for a moment, crossing the Equator.



RUNIC STONE. ZEELAND.
Pre-Christian.

It was to the cross that the dwellers on the Aztec Plateau made a pilgrimage to Cholula to invoke the help of Quetzalcoatl, god of the winds, and offer sacrifices to him that he might send down rain upon their parched lands.

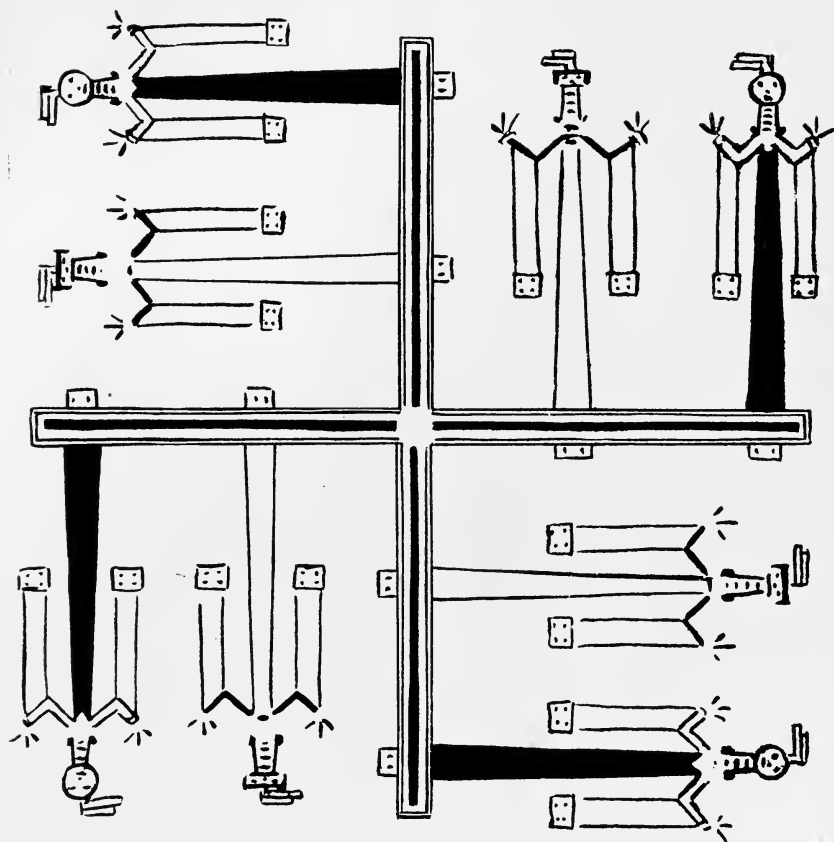
At the foot of the cross the people of Oaxaca offered their supplications to Votan, "Heart of the Heavenly Kingdom," when their lands were parched with prolonged droughts, and it was before the "Cross of Cozumel" the Mayas and Quichés stood when they petitioned their god Chuchulcan to send them rain and save their crops from the locusts and the hot winds. The temple of the cross on the Island of Cozumel off the coast of Yucatan was frequented, at times, by such multitudes from Tabasco, Chiapas, Honduras and Yucatan that paved roads were constructed from the distant towns to the shore where embarkation was made for Cozumel. (Cogolludo, "Hist. de Yucatan," Book IV. C. 9.)

It is a singular and striking analogy, that among the Egyptians in the time of Moses, the cross was also the symbol of rain and fertility. Placed in the hand of Osiris, it was the emblem of spring, and in the hand of Isis it represented autumn and the inundation of the Nile. In Yucatan the crosses in the temples of Nachan, the god of dews, and the Taus—T discovered in the ruins of Chi-Chin-Itza symbolized the overflow of the waters of the Uzumacinta and Tabasco Rivers on the

bordering lands. As the inundation of the Egyptian Nile is periodic and caused by the great rains falling on the mountains of Ethiopia, so the overflow of the two rivers of the peninsula of Yucatan results from the rains which fall on the distant mountains of Cachumatanes.

THE SWASTIKA CROSS.

I was in Tucson, Southern Arizona, fourteen years ago, when a jeweler showed me a strangely designed scarf-pin he had made to the order of a lady, a guest at the Santa Rita Hotel. It was fashioned in gold and the design was peculiar and



THE SWASTIKA CROSS.
On Navaho Altar Floor.

unique. The jeweler asked me if I had anywhere seen anything like it and, if so, by what name was it known? I answered that I had seen the design painted on Navajoe blankets and on Zuni and Papago ceremonial articles on exhibition in the anthropological department of the Field Columbian Museum, Chicago. I could not tell him the name of the symbol or what it stood for. So far as I know, this strangely fashioned gold pin was the first of its kind made in the United States and with it began the remarkable vogue which made the uncanny design a popular ornament as a belt buckle, brooch, scarf and hat pin.

The jewelers and curio dealers will tell you now that this weird design with each of its four arms bent to a right angle is called the "Swastika" and that it is an Indian amulet conferring good luck and prosperity on the wearer. The Tucson

jeweler, had he known of the wonderful properties of the thing he had just finished, might have sold a gross of the enchanted pins, in a few weeks, to the citizens of Arizona and to tourists from the east.

This mysterious symbol, wherever found, in Europe, Asia, Northern Africa, or America, marks the migration of a great and numerous race of a common origin or of common religious affiliations. It was the symbol of the water god of the Gauls and is known to French and German anthropologists as the *Gramponné*. Among the Scandinavians it was the "Hammer of Thor" their war god. It was cut into the temple stones dug by Schlieman from the ruins of Troy, and burned into the terra-cotta urns found by Desire Charney in the pre-Toltec city of Teotihuacan, Mexico. It was an iconism of the ancient Phœnicians and was carved on the walls of the inner sanctuary of the Temple of Gigantea. It was chiseled thousands of years before the Redemption, by the Brahmins on the sacrificial stones in the Cave of Elephanta, India.

It is the "Hylfol" cross of Buddha and is seen to-day on the breast of Buddha, in China; and many of the ancient temples of India, Burmah, Cambodia, Java, and Corea show a high development of the Swastika in ornamental embellishment. Bishop Hanlon, Vicar-Apostolic of the Upper Nile, says: (I. C. Missions, Oct., 1894) that it is a symbol of worship among the Ladacks, a Buddhist community, living in Gebel-Silsili and in the land of Edfou, Egypt.

When we search for it in Europe and America we are surprised to learn that Cedric the Gaul carries it on the sail of his ship when he enters the port of Bally, Isle of Man, one hundred and fifty years before the Christian Era. It was venerated by the pagan Icelanders, as a magic sign of the god of the winds and by the Celtic Druids in their forest rites in the oak groves of Ireland and Scotland.

In a foot note to the Sagas, first edition of Longfellow's Poems, we are told that the Hammer of Thor, the Scandinavian god, who gave his name to Thursday, was shaped like a Swastika. It was with this mighty hammer Thor crushed the head of the Midgard serpent and destroyed the giants. Longfellow, after recording the conversion to Christianity of King Olaf tells us in charming verse how the King kept Christmas or Yule-tide at Drontheim:

O'er his drinking horn, the sign
He made of the Cross Divine,
As he drank and muttered his prayers;
But the Berserks evermore
Made the sign of the Hammer Thor
Over theirs

Long after the conversion to Christianity of the Norsemen the Swastika hammer of Thor was retained in festal ceremonies and was often introduced into ecclesiastical decorations.

The eminent Egyptologist, Prof. Edouard Naville, when excavating (1912) in Abydos, the modern Arabat, Upper Egypt, tells us he found the Swastika on the tomb of Osiris and among the inscriptions and designs on tablets buried for five thousand years in Upper and Lower Egypt.*

Professor Petrie says it is on the pictorial representation of the "Judgment of Death," done sometime after Menes, the first of the Pharaohs, became the god Osiris.

Among the wonderful articles—paintings, statuary and unfamiliar objects—on exhibition in the Boston Museum there is a large painting on silk. This is the

*Encyclop. Met. Article, Egypt.

"Fugie" which six hundred years ago hung in a Temple of Buddha, Japan. It pictures Buddha seated on a throne of ivory and gold, surrounded by winged spirits and, higher up in the painting, two minor divinities. Between these two divinities in the centre of a golden ring is a brilliant Swastika resting on a cushion of silk. It is sacred to Buddha and is one of the marks by which his worshippers will know him, when he returns to earth.

In the woven fabrics found in Swiss Lake dwellings of Neolithic man, in Scandinavia and in nearly all parts of Europe, we find this strange emblem. It is cut into the old Devonshire stones, a good specimen of which is in the Museum of Torquay, England. It was a sacred sign among the British Druids and, strangest of all, among the Nilotic negroes, it is to-day found shaven upon the heads of locally famous warriors.*



THE CROSS OF CEDRIC THE GAUL.

Turning now to ancient America and looking over the known pre-Columbian world we see the Swastika on monuments, sacrificial altars and on small and comparatively insignificant articles of pottery and moulded ware.

M. Desire Charney as late as 1869, in his expedition to Mexico and Yucatan, dug up the, now well known, "Cross of Teotihuacan," which had been fashioned and set up in the once populous city by the Toltecs in honour of Tlaloc, their god of rain and fertility.† Dr. Hamy, who read a paper before the Academie des Sciences, Nov. 1882, supports M. Charney in his contention that the cross everywhere in America symbolized water and fertility. Of the time when this cross was raised in Teotihuacan we may only conjecture.

The Mexico-Spanish historian Torquemada writes (Tome 2, Lib. Cap. 23 of his History), that Tlaloc was the oldest of the Toltec gods. Certainly Tula and Teotihuacan seem to have been nearly coeval. Tula, according to the native historian Ixtlilxochite, was founded A.D. 556; Clavigero has it A.D. 667, while Vetia makes it as late as A.D. 713. Even if we accept Vetia's date the cross is very old. At the base of this cross when found was a Swastika boldly sculptured and dedicated to Tezcatlipoca, the god of the winds.

*"Uganda," Sir H. Johnston, Fig. 143.

†"Cités et Ruines Americaines," p. 48 *et seq.*



STATUE OF BUDDHA, COLOSSAL FIGURE FROM CHINA.

In the last edition of the *Encyc. Americana*, we read that the Swastika has been exhumed from burial mounds within the limits of the United States.

Baron von Humboldt in his "*Voyages aux Regions Equinoxiales du Nouveau Continent*" (Hauff, 1859, p. 93) tells us it was a conspicuous ornament on the tombs of the Incas of Peru.

Professor Herbert J. Spinden in his "*Study of Maya Art*" (Cambridge Press, 1913) assures us that everywhere in Yucatan and Central America the Swastika is found on the ancient buildings. It fills a conspicuous place in America to-day in the religious rites of the Navajoes, the Zuni and Papago Indians in New Mexico and Arizona. The sacred totem of the Crow Indians, both Mountain and River men, is the Swastika placed above two circles with another Swastika on a disk in the centre of a circle. ("*Signs and Symbols of Primordial Man*," Churchward, 1910.)



TERRA COTTA URN.
Pre-Christian Sweden.

The elaboration of this cross in ancient religious and ceremonial rites leading to identities in strange and mysterious features, has proved to be one of the most singular phenomena of native culture in the New World and indeed in the Old. Nor has anyone been able to account for the perpetuity and universality of this obscure figure.

Professor Black and John Fiske, late of Harvard, say it is of Phallic origin, but it bears no resemblance to the "*Crux Ansata*," the true Phallic icon, resting in the hand of Serapis at Sinape and destroyed by the soldiers of Theodosius. John Fiske and Prof. Black, when giving a Phallic origin to the Swastika, forget that nowhere in America has anything been found, or any tradition been handed down, indicating the existence, in the remote past of the people, of Phallic worship.

SYMBOLISM OF THE SWASTIKA.

Among the ancient races of the Old Continents and among the pre-historic Southern Indians of North America, and among the early Peruvians, the Swastika was the emblem of the sun and of the winds which blew from the four cardinal points.



Mether Cup.

NOTE.—Mether Cups were in common use among the early Celts in Ireland and Scotland. The ordinary drinking-vessel was a *meth*er (so called from mead or meth, a fermented liquor of honey and water), made of wood and, at meals or drinking-bouts, passed from hand to hand, each giving it to his neighbour after taking a drink. Many of these ancient *methers* are preserved in public museums and in private collections. The *swastika* and the Latin cross are carved side by side on a few of the cups. They are found in deep bogs and in remote mountain wilds of Scotland and Ireland and are now becoming very rare. Their antiquity is very great, and when found are generally blackened with age, resembling bog oak. The photo reproduction is from a cup now in possession of Dr. Charles O'Reilly, "Ballinlough Lodge," St. Clair Avenue, Toronto. It is an exact duplicate of the cup now preserved in Ballinlough Castle, County Meath, the homestead of the O'Reillys of Brefney. The original cup has been in the possession of the O'Reillys since the time (1596) when the Irish chief, Mailmora the "Handsome," better known in Irish history as Myles O'Reilly—"The Slasher," fell at the Battle of the Yellow Ford defending the Bridge of Finea against the invaders of his country. As the cup carries the pagan Swastika and the Christian Cross it probably belongs to the fourth century, when the Irish Celts were passing from Druidism to Christianity.

The god of the winds was the first offspring of the sun who was, at his rising in the east, saluted with the "Blazing Torch." When the Shanan after saluting the sun, turned to the four points from which came the winds he formed a cross and the blaze blown by the winds fell away from the torch and formed the right angles which, in time, suggested the Swastika. Let me illustrate my meaning. In the Tenth Letter of Father De Smets, "Life and Travels among the North American Indians," edited by Major Chittenden (Funk, Wagnalls, N.Y.), there is an interesting account of the customs, religious rites and habits of the Assiniboins.

The great missionary was a privileged guest when the salutation to the Sun and the Four Winds and Water occurred among the Assiniboins. He writes: "Sometimes three or four hundred lodges of families assemble in one locality. One sole individual is named the High Priest and directs all the ceremonies of the Festival . . . After these preliminaries the ceremony begins with an address and a prayer to the Great Spirit. He implores Him to accept their gifts, to take pity on them, to save them from accidents and misfortunes of all kinds. Then the Priest holds aloft the smoking Calumet to the Great Spirit, then to the Sun, to each of the Four Cardinal Points and at each time to the Earth."*

Writing of the Cheyennes, Colonel Henry Inman, one time scout and trailer with General Crooke, informed us that this formidable tribe had no religion: "if, indeed, we except the respect paid to the pipe. In offering the pipe to the sun, the earth and the winds, the motion made in so doing by them describes the form of a cross; in blowing the first four whiffs, the smoke is invariably sent in the same four directions."†

Here then we have the rectangular cross, coming down through the ages from the time when, in the Garden of Eden, the rivers crossed and made Eden a Paradise of fertility, and the Swastika of Vedaic India retaining the basic cross but altered by the dip of the torch in the hand of the priest, or by the blowing of the flame by the four winds which the Swastika symbolised.

THE CROSS IN THE DESERT.

When travelling in lower California a few years ago, I began on a beautiful morning the ascent of the mount overlooking the little Indian Village of San Hilario. As I advanced I looked up and saw something raise itself above me like a thing alive. It was a giant Suahara, a candelabrum cactus, and near it a yucca tree, whose cream-like blossoms, trembling in the glorious sunlight, seemed strangely out of place in such forbidding surroundings. Higher up and to my left as I ascended I came to a rough and weather-worn cross standing in isolation by the lonely path. It marked the spot where five years before, an Indian wood-gatherer was slain and his body mutilated. On my return to the squalid village I learned that it was a custom among the Cochimis—Digger Indians—to raise a cross over a lonely grave or mark the place where a murder had been committed. The Padres—the missionary fathers—are gone and the chapels they built in the

*The Cross and the Swastika in America, particularly in Yucatan and Mexico, are frequently mentioned by the early writers, such as: Garcia, "De Los Indios," Book 3, Chap. VI, p. 109; Sahagun, "Hist. de la Nueva Espana," Book 1, Chap. II; Ixtlilxochtl, "Hist. des Chichimeques," p. 5; Cogolludo, "Hist. de Yucatan," Book 4, Chap. IX; Sotomayor, "Hist. de el Itza y de el Lacandon," Book 3, Chap. 8. In truth, if all references to the Cross were collected from the books and pamphlets left by the Mexican Spanish writers of the Fifteenth and Sixteenth Centuries, and bound together, they would make a large volume.

†The old Sante Fé Trail, p. 244.

wilderness are now melancholy ruins, but the wandering savage in the desert or on the mountain yet retains the tradition of the sanctity of the cross. The fire the Franciscan Fathers kindled, yet lives, and in every scattered encampment of the Digger Indians, and in every half-breed Xacal, a wooden or grass-woven cross reminds the Peninsular Indians of the Story of the Cross told to their dead sires by the Spanish missionaries, and "So it is," writes Henry C. Van Dyke, "the untutored dwellers of the desert have cherished what the inhabitants of the cities and the fertile plains have thrown away." Borrowing the language of the poet we may also say:

"This is all
The gain we reap from all the wisdom sown
Through ages; nothing doubted those first sons
Of Time, while we, the schooled of centuries,
Nothing believe."

And now may I end this dissertation on the cross with Longfellow's beautiful reference to the "Cross of Snow," in the Colorado range, a photographic reproduction of which appeared in the London *Graphic* not long ago.

In the long, sleepless watches of the night,
A gentle face—the face of one long dead—
Looks at me from the wall, where 'round its head
The night-lamp casts a halo of pale light,
Here in this room she died; and soul more white
Never through fire of martyrdom was led
To its repose; nor can in books be read
The legend of a life more benedight.
There is a Mountain in the distant West
That sun-defying in its deep ravines
Displays a Cross of snow upon its side.
Such is the Cross I wear upon my breast
These eighteen years, through all the changing scenes
And seasons, changeless since the day she died.



ONTARIO EFFIGY PIPES IN STONE.

By COL. GEO. E. LAIDLAW.

THIRD PAPER.

After finishing my second paper which appeared in the Report for 1913, I became aware of several more specimens, which are placed in the first section of this paper.

In pursuing my investigations on above subject, I have come across enough specimens of a separate distinct type to form a special class, and the further I dipped into this line the more specimens I got track of. This special type obtains in the St. Lawrence basin and may be of a later date than the effigy pipes discussed in previous papers, or a type reaching down to historic period. I will not go so far as to designate them to any particular people or tribe, but I should judge from certain indications that the Huron-Iroquois would have the most claim on them.

A very large percentage of these pipes come from the Province of Ontario, the counties represented being Huron and Simcoe, in the Huron territory, Ontario intermediate between the Hurons and Algonquins, Hastings in Algonquin territory, Wentworth and Brant in Neutral territory, and Grey in the Petun or Tobacco Nation territory.

Strange to say the material is nearly always a white or light-gray stone, steatite and limestone being the two varieties mostly used. The steatite pipes are the best preserved, while the limestone ones are very soft and would not stand much use, weathering or calcination, so therefore the latter must be of short duration and no great age can be claimed for them. The specimens of the latter material examined by the author are generally more or less weathered, much more so than other stone pipes, and I would not expect them to last nearly as long as those of other pipe materials such as steatite, slate, sandstone, or catlinite.

This class or type can be divided into two sections, as follows:

1st, Long slender stemmed pipes, with effigies, either human or lizard, clasping the front of the bowl, with head projecting above rim, and when the effigy is a lizard the tail extends along underside of stem. Sometimes only the human head is represented (in one case an animal) perched on edge of bowl.

2nd, Stemless bowls of an ovoid or vase type, with the effigies clasping, or crawling up the bowl on the opposite side of the stem hole. In this second division, so far as observed, the effigies are those of lizards, with one exception. Pipe Mus. No. 17,139.

This third paper is divided into three sections: 1st, The type of effigy pipe treated of in papers one and two.

2nd, Stemless bowls with effigy in relief.

3rd, Long, slender stemmed bowls, with effigy in relief (a peculiar type of its own).

The museum referred to is the Provincial Museum of Ontario, situate in Toronto and the reports are the Ontario Archæological Reports issued by the Board of Education, except when otherwise stated. Also the measurements are in inches and the weights are avoirdupois, except when otherwise stated.



Animal Pipe—Manvers Twp.

Animal pipe, Manvers Township, Durham County, Ontario, Figure 484, p. 78, *Stone Age in North America*, Vol. 2, by W. K. Moorehead. This pipe is owned by Mr. J. G. D'Olier, of Rochester, N.Y. His description is as follows:

"Very fine banded slate, almost black, bands running longitudinally, back highly polished, part of belly and inside of tail show that it was made by pecking. Three incisions on each foot to indicate toes, no eyes and only a very slight depression on top of head to give a semblance of ears, weight 4 oz., length $3\frac{1}{8}$ inches."

In this specimen the tail is not produced to meet the chin or curved up in front of the body as is usual. The legs are conventionalized and are carved on the sides of the body. The hind legs being turned up the reverse way, or inversed.

Mr. D'Olier does not know the exact locality where these two (this animal pipe and the Manvers bird pipe) were found. He cannot give lot or concession, but thinks it was not far from Millbrook P.O., Caven Township, Durham County, and supplies the following history of them: "A Mr. Vance who taught school at Bobcaygeon, Victoria County, gave them to a Mrs. Richard Hughes, aunt to Mr. D'Olier, in the early '60's. telling her that he dug them up—together with a 'bird stone'—in 1844, out of a mound in Manvers Township. There were a great quantity of bones in the mound which the Indians said were remains of an enemy killed in battle. These three relics remained in Mrs. Hughes' possession till a few

years ago when she gave them to Mr. D'Olier. Prof. W. H. Holmes, Head Curator of Ethnology, of U.S. National Museum, Washington, remarks: "The specimens appear to be of a very high grade of excellence in manufacture:

Note by G. E. L. This mound may have been an ossuary, several of which were formerly opened years ago in that district. What few mounds occur there do not contain "great quantities of bones." The word "mound" is often used by ordinary people to designate any Indian work, such as mounds, ash beds, graves, ossuaries, caches, and even pits or trenches.



Bird Pipe—Manvers Twp.

Bird Pipe. Manvers Township, Durham County, Ontario, Fig. 483, p. 78. Stone Age in North America, vol. 2, by W. K. Moorehead, is also owned by Mr. D'Olier and described by him in a letter of 2nd August, 1914, as follows:

"Very dark-grey banded slate, bands running longitudinally. The incised line which forms the wing on side shown in figure follows closely a contour of a red band which looks like a seam infiltrated with iron. The incised line and the seam is slightly tinted with red. The reverse side is plain. The eyes are deep, and ears well defined. There is a V shaped incision under the chin. The hole in frontal projection is drilled about $\frac{1}{3}$ through from the 'wing' side. The upper side of the hole is flush with the top of the projection, while there is $\frac{1}{8}$ inch space left at the bottom. It is just the reverse on the other side, so that hole which is $\frac{1}{4}$ inch in diameter does not meet flush. Total length of pipe 3 inches, weight 2 oz. Mouth cut well back under eye." Bird probably represents a Horned Owl though the beak is rather elongated. The ears and eyes denote a Horned Owl.

Note by G. E. L. The material is evidently a variety of Huronian slate, as I have seen other Huronian slate relics showing a patch of red.



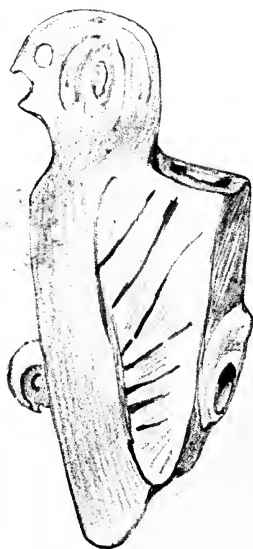
Michigan Panther Pipe—side view.



Michigan Panther Pipe—back view.

Michigan Panther Pipe. We are indebted to Mr. Chas V. Fuller for photos and information of this pipe, which is of banded slate and was found in Barry County, Michigan. Is now in the possession of Mr. A. B. Winans, Battle Creek, Michigan. The photos are about $\frac{1}{2}$ size. Letters of 28th June and 26th July, 1914. Note the numbers of slots in this pipe. He further says that: "The effigy pipes of Michigan are very similar to those found in Ontario, but are not numerous . . . the bird pipes predominate."

A bird pipe similar to the New York bird pipe, fig. 103, Bulletin on Polished Stone and page 28 Ontario Effigy Pipes. 1913, was found in Ionia County, Mich., the beak being much longer in the Michigan specimen.



Michigan Owl Pipe.

Owl Pipe, Michigan. In possession of Mrs. Nellie Gowthrop, Camden, Michigan. Figure is produced from a tracing of the illustration figure 475, page 67, Stone Age in North America. Size 1-1, material grey slate—striped longitudinally. No further data could be obtained about this pipe. There is one longitudinal cut down the body with some diagonal cuts meeting it, evidently denoting the wing. Note the raised portion surrounding the stem hole. Eye faintly marked. Cross section above stem hole is probably squarish or oblong.

Panther Pipe, Monongahela, Pa. Mr. Gerrard Fowke, in letter of June 15th, 1914, describes a panther pipe as follows:

"Some years ago a fine panther pipe was found in a small stone mound not far from Monongahela, Pa. It was green slate, beautifully worked and highly polished: the finest I ever saw. The tail gradually tapering reached to the head and all four paws grasped it. In the eye sockets were set perforated shell discs, giving a remarkably life-like, wide awake expression. I think it was finally secured by some Pittsburg collector." This may be the panther pipe figure 25, page 43, 1902 Report, mentioned in my first paper.

STEMLESS LIZARD PIPES.

Pipe Museum No. 99. Figure 83, page 3, Report, 1890, also figure 129 a, page 54, Primitive Man in Ontario, by the late Prof. David Boyle, is one of these stemless bowls on which there is a lizard form in bas relief. This pipe is of grey steatite and was found on Lot 8, Concession 6, Nelson Township, County of Halton, Ont., by Mr. George D. Corrigan, who presented it to the Museum.

A most interesting feature of this pipe is, that it once evidently had a stem which became broken off, and then to keep the bowl in use, a secondary stem hole was bored into the bowl above the break. The break leaving a "nub" or protuberance, which has evidently been worked at to reduce its size by means of rubbing down and having a circular cut around it. The bowl was bored into the original stem hole, which being broken through leaves a perforation through the present base, which would be "plugged" in use. The tail of the lizard is broken off too.



Mus. No. 99.

The body of the lizard is long and slender with the legs embracing the bowl, a portion of the body is completely separated from the bowl for about $\frac{5}{8}$ inches at the belly and is raised away from the bowl $\frac{1}{8}$ inch. There is a long incision down the back for nearly its full length. The head is a mere "nub" separated from the shoulders by a nick and from the bowl by another nick. No features are shown. The head may have been damaged and then ground down again.

Though the rather long legs are well shown, no feet or claws appear.

The bowl, which is slightly rectangular at the top, shows gouge marks in side. Has been smoked recently.

Present perpendicular height, $1\frac{3}{4}$ inches. Depth, back to front, $1\frac{1}{2}$ inches. Width, side to side, 1 inch. Diameter of bowl orifice, $\frac{3}{4}$ inch, and of secondary stem hole, $\frac{5}{16}$ inch.

Surface polished, and shows some tool marks. All workmanship on this pipe appears to be aboriginal.

The long forelegs and broad shoulders give the upper part of the back a slightly human appearance. The encircling of a break by an incision all round

is also noted in the Headless Bird pipe from Somerville Township, page 45, Report 1913, and No. 9806 of this paper.

Pipe, Museum No. 17,139, Figure 10, page 49, Report 1898, also page 28, Notes on the sites of Huron villages, Township of Tay, Simcoe County, by A. F. Hunter, belongs to the T. F. Milne collection in the Museum and comes from the Bell Farm, Lot 76, Concession 1, Tiny Township, Simcoe County, Ontario. This pipe is of darker soapstone and is a more finely finished and a better specimen than the proceeding one.

The animal represented is probably a bear as it has no tail. The legs are shorter than those of the last specimen and merge more directly into the bowl. Feet or claws not shown. Head is very small projecting but a $\frac{1}{4}$ inch above outside edge of bowl. A face being depicted thereon looks slightly human, though it is hard to tell what animal it represents as it is flat with only eyes and nose roughly designated; the face being slightly broader than long being $\frac{1}{4}$ by $\frac{5}{16}$ inches.

The body is separated from the bowl by an oval space of $\frac{3}{8}$ by $\frac{1}{8}$ inches. The buttocks being separated from the bowl by a deep nick. There is one long slight incision from top of head to nearly end of back, also one on each side from the shoulder down. *Anus* denoted by slight nick.



Mus. No. 17,139.

Perpendicular height, $2\frac{1}{4}$ inches. Depth, back to front, $1\frac{5}{8}$ inches. Width, side to side, $\frac{15}{16}$ inch. Body not so slender as previous specimen. Bowl more rectangular. Inside diameter, $\frac{3}{4}$ inch; shows gouge marks. Stemhole, $\frac{1}{2}$ inch in diameter. Bowl, $1\frac{1}{4}$ inch deep. Surface of pipe very finely polished and shows few tool marks or scratches. There is a slight projection on the bottom immediately below the stemhole that is perforated from back to front for suspension purposes or else to more firmly fasten the stem to pipe. This pipe is essentially aboriginal in conception and execution, and is a very fine specimen of aboriginal work.

Pipe Museum No. 25579, Fig. 7, p. 53, Report 1903 is more pretentious, and of a bolder design than either of the two preceding specimens. This pipe is of a mottled dark grey soapstone and comes from the graveyard on the Walker Farm, lot 10, con. 3, Onondaga Township, Brant County, associated with the white stone pipes and European relics. Quoting Mr. Boyle, p. 53, above report. "Perhaps the creature intended to be represented on Figure 7 is a lizard, but in support of this supposition there are only the elongated body and tail, and the whole may be merely a conventionalized form. The material is steatite of very poor quality, and so far as the workmanship is concerned there is nothing to indicate the use of any but primitive tools. The bowl is a flattened oval, the cavity of which is as smoothly finished as the outer surface."

Dimensions, perpendicular height, $27\frac{7}{8}$ inches; bowl orifice 1 inch by $11\frac{1}{16}$ of an inch, depth 1 inch, stem hole $\frac{3}{8}$ of an inch in diameter.



Mus. No. 25,579.

The lizard is very long in proportion to bowl, the head projects at present $\frac{7}{8}$ of an inch above bowl, and has a portion broken off leaving only right ear and eye; the body tapers gradually from the shoulder to the tip of tail which passes around the base of the pipe ending at the stemhole. The body is separated from the bowl by an oval space between the fore and hind legs, $\frac{3}{4}$ of an inch by $\frac{1}{8}$ in size, and by an irregular shaped hole between the hind legs and the tail. The legs are "en bloc" in pairs, and of uneven length merging into the pipe bowl, claws or feet being designated by several slight irregular cuts in each case.

This pipe though having several flaws, has the surface well polished, and shows but few tool marks, and is another good specimen of aboriginal workmanship. The animals of these stemless lizard pipes are on the side of the bowl opposite to the stem hole, or on the side that is farthest away from the smoker. Though they project over the brim sometimes, as if looking at the smoker.

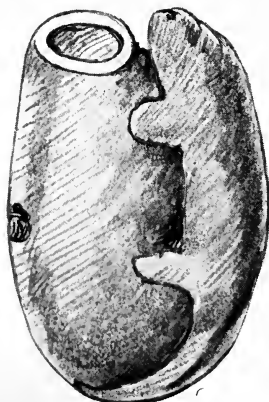
These stemless effigy pipes of this class appear to me to be absolutely aboriginal in design and workmanship. It is much easier to bore a large stem hole in the bowl for a reed or wooden stem than to bore a small stem hole in a long stone stem.



Jefferson Co., N.Y.

This stemless lizard pipe is in the New York State Museum and is from Jefferson County, N. Y., date 1895, collected by Mr. Twining. We are indebted to Mr. A. C. Parker, State Archaeologist, N. Y., for drawing and data.

The pipe is more vase shaped than the ones just described, but it may be remarked that vase shaped pipes are common in the Province of Ontario, especially in this district, east of Lake Simcoe. Approximate height of pipe $3\frac{3}{4}$ inches. The legs and feet are given in better detail than the preceding specimens, and each leg is separate from the others. The spaces between the pipe and lizard are also much larger. Material and other data not furnished.



Huron Co., Ont.

This fine specimen of a lizard on an elongated ovoid bowl comes from Huron County, Ontario. Material red sandstone. (Perhaps Nottawasaga sandstone as I have seen pipes and fragments of pipes of that material). Is figured and described by F. C. Alkire in *Popular Science* of June, 1901.

The effigy in this case clings close to the bowl leaving no apertures. Dimensions not given.



Mus. No. 94.

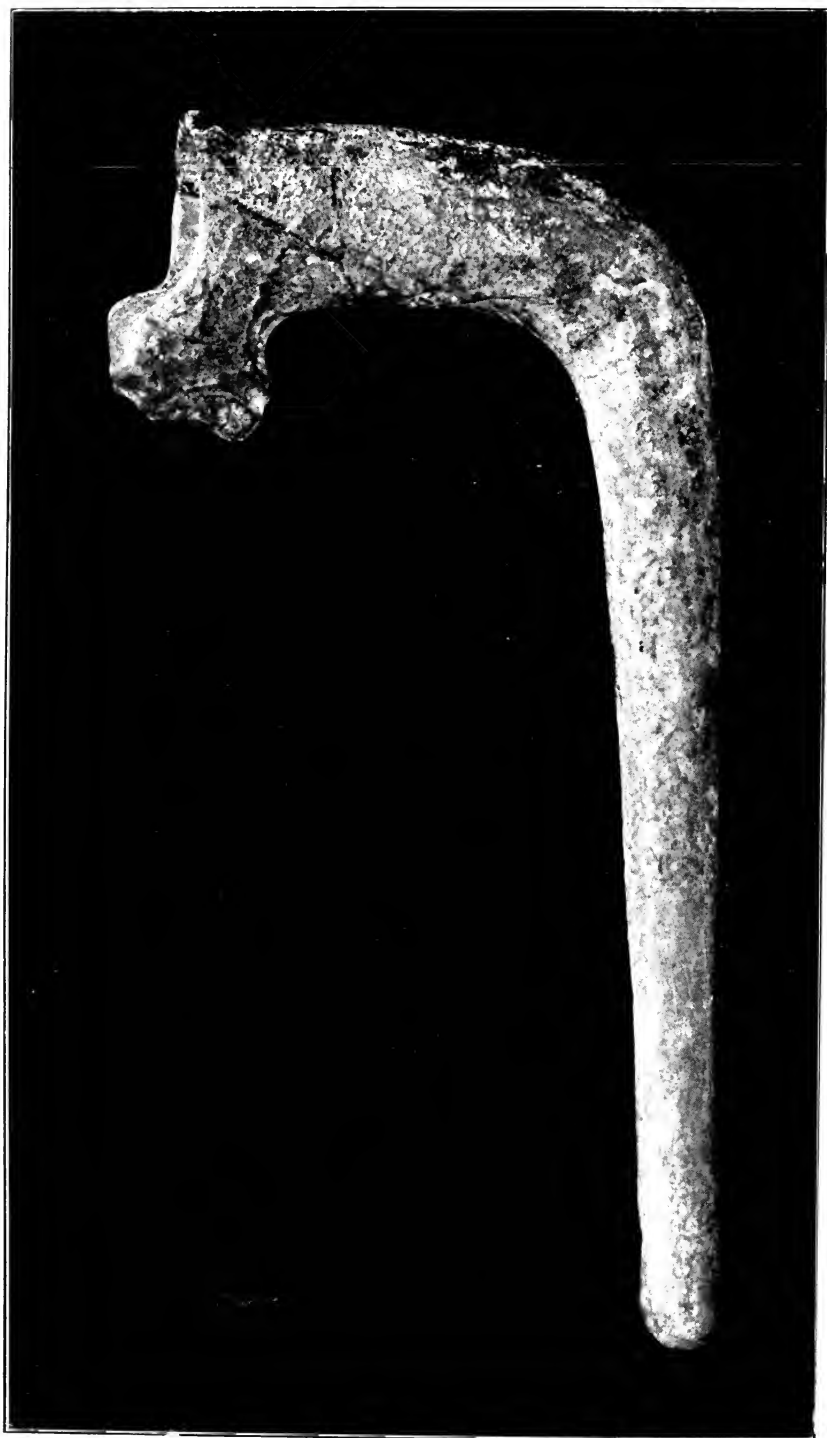
STEMMED EFFIGY PIPES.

Pipe, Museum No. 94. Came to the Museum through the York Pioneers collection and was presented to the York Pioneers in 1885 by Mr. John Perry. Was found near Lake Medad near Hamilton, Ontario, and is of soft whitish limestone, very much weathered and pitted. Dimensions, height, $3\frac{1}{2}$ inches. Stem broken at mouth piece, $2\frac{1}{2}$ inches remain. Bowl, flaring slightly, has a depth of $2\frac{1}{2}$ inches, and a diameter of $\frac{3}{4}$ inch.

Human head surmounting rim of bowl facing smoker. Features almost obliterated by weathering. Head seems to have been surmounted by a "bêret" shaped cap. Stem is $\frac{1}{2}$ inch in diameter and stem hole $\frac{1}{4}$ inch in diameter.

This pipe has not been figured before. The head projects $1\frac{1}{4}$ inches above bowl. See Fig. 38, p. 54, Report 1902, first paper on "Ontario Effigy Pipes in Stone" for human figure with "bêret" shaped cap.

Dr. R. B. Orr in letter of 5th Aug. 1914, states locality of pipe and how it came to the Museum.



Mus. No. 95.

Pipe, Museum No. 95, Fig. 18, p. 31, Report 1889, also Fig. 81, p. 35, Report 1890, is a white stone pipe from the Lotteridge Farm, near Hamilton, Ontario. The pipe is $6\frac{1}{2}$ inches long and $3\frac{3}{4}$ perpendicular height, with an animal's head on side of bowl facing smoker. The surface is very much weathered. The animal's head probably represents a bear, but is much weathered. The mouth is very distinct, ears and eyebrows being denoted. The mouthpiece (or proximal end of stem) is swelled out slightly larger than the adjoining stem. Bowl slightly flaring, is $2\frac{1}{4}$ inches in depth and $\frac{3}{4}$ inch in diameter; inside measurement. Diameter of stem-hole $\frac{3}{8}$ inch. Bowl shows gouge marks, any outside surface marks of manufacture have been removed by weathering. Stem tapers down from $\frac{5}{8}$ inch at bowl to $\frac{7}{16}$ inch immediately in front of mouth-piece. This pipe is also from the York Pioneers collection in Provincial Museum.

See also Primitive Man in Ontario, Fig. 122, p. 53.



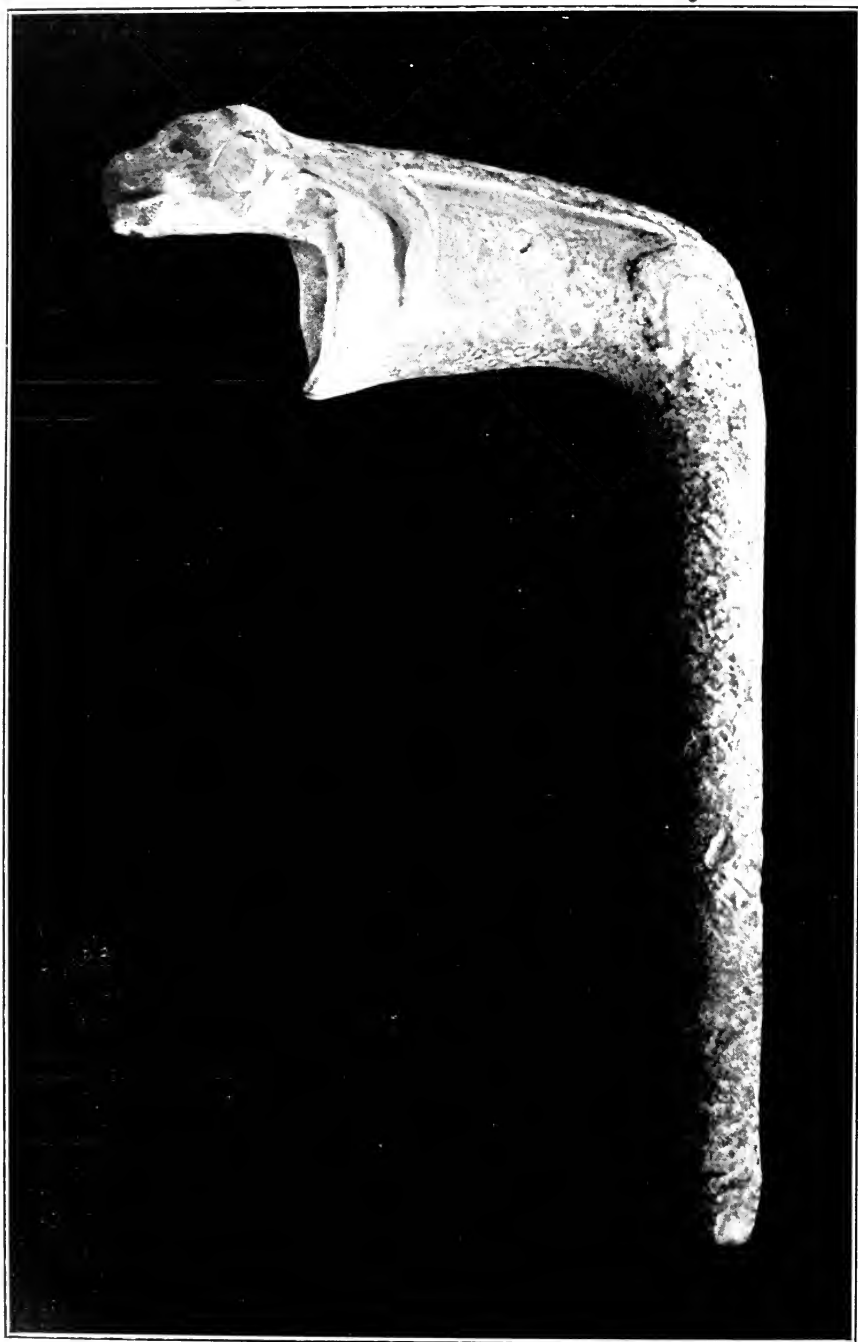
Mus. No. 9,806—side view.



Mus. No. 9,806—face view.

Pipe, Museum No. 9806, Fig. 5, p. 16, Report 1892 is a smaller one of same character. The stem being broken off, and break slightly rubbed over. Has an encircling cut above break. (This feature is also noted in the Somerville bird pipe, 2nd paper, and in stemless pipe No. 99 this paper.) A portion of bowl is broken off. A triangular human face on edge of bowl faces smoker, the head being surmounted by a cap, or else a head dress is denoted. Mouth, nose, and chin prominently denoted, the eyes not so well. There is a slight cut between the upper lip and nose running across the face from side to side, several long, slight marks on each side of face meet under the chin and run down the bowl turning off to left side. These may have been made by another person than the maker of the pipe at a later date. The surface is polished almost as good as some soapstone pipes. Material is a compact grey limestone. The pipe was presented to the Museum by Mr. W. O. Wright, of Collingwood, Ont. (in Tobacco Nation territory).

The inside diameter of bowl is $\frac{1}{2}$ inch. The inside of bowl shows marks of both drill and gouge. Diameter of stem hole $\frac{3}{8}$ inch, and may have been slightly enlarged after the stem was broken off to accommodate a reed or wooden stem. Altogether the pipe must have been a neat piece of aboriginal workmanship originally.



Mus. No. 10,554.

Pipe, Museum No. 10,554, Figure 15, page 29 Report 1891, also Figure 121, page 52, Primitive Man in Ontario, is another one of these slender white stone pipes with lizard effigy, taken from a grave at Lake Baptiste, Herschell Township, Hastings County, associated with European relics. This grave was supposed to be in an Ojibwa burying ground, see page 14, Report 1891. The pipe was found by a Mr. Archibald Riddel, who presented it to the Museum.

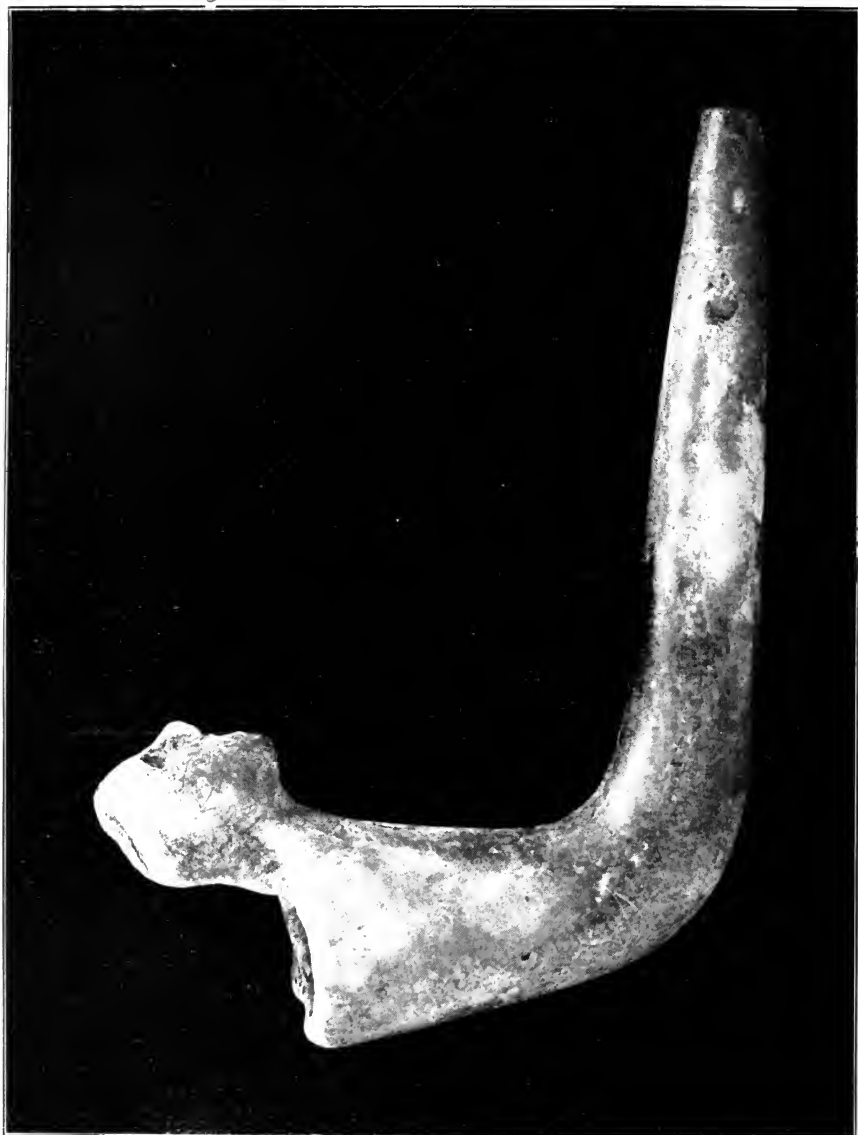
Dimensions, perpendicular height $3\frac{3}{4}$ inches, of which the head projects one inch above the bowl. Length of stem measured to outside of bowl $7\frac{1}{2}$ inches. The stem has a slight swelling for mouth-piece, and is rather flat on the sides where it joins the bowl, and has about the same width all through of $\frac{1}{2}$ inch, whilst it is about $\frac{3}{4}$ deep (from top to bottom) at the bowl, it tapers down to a diameter of $\frac{7}{16}$ just before the mouth-piece. The surface of specimen is much weathered, more so on one side than the other.

The length of the lizard is $6\frac{1}{4}$ inches from the tip of the tail to nose tip. The legs are more or less conventional and do not terminate in feet, no feet or claws being shown. The tail, being very slender, extends under the pipe for $2\frac{1}{2}$ inches. The body is long and slender having a slight ridge down the back. The muzzle is blunt, the mouth well defined. The eyes are deep small holes. There are slight traces of ears, having apparently been "weathered" off.

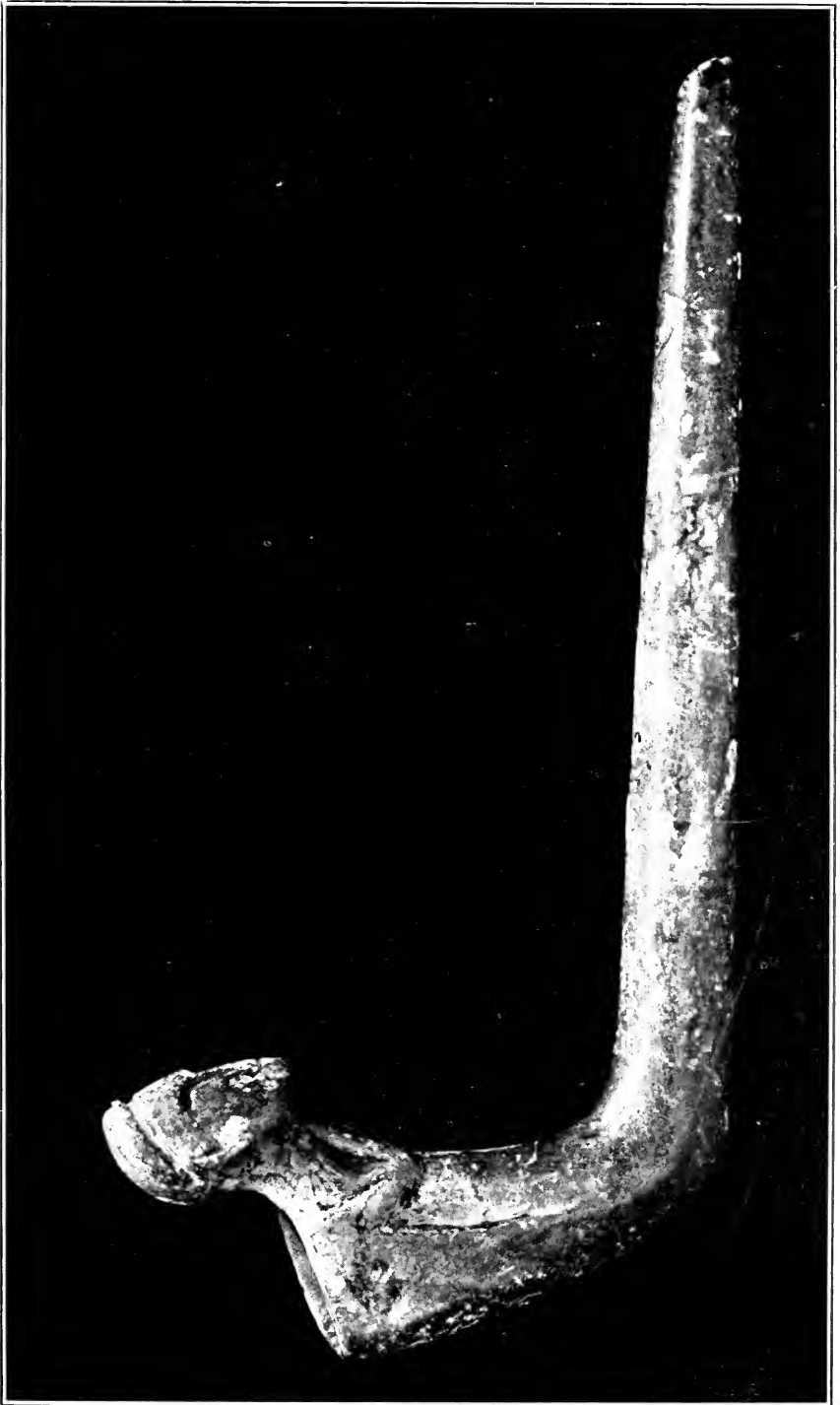
Diameter of stem hole $\frac{3}{16}$ of an inch. Inside diameter of bowl $\frac{3}{4}$ of an inch, depth of bowl $\frac{3}{4}$ of an inch, being further drilled, with a small hole to meet the stem-hole. The position of the lizard is on the outside of the bowl with the head projecting above the rim with body and tail extending down the bowl and underneath stem, with the legs clasping the bowl. There is no orifice between the lizard's body and the bowl. Weight $3\frac{3}{4}$ oz. avoirdupois.

Pipe, Museum No. 25,553, see page 15 Report 1903. Comes from a graveyard on the Walker Farm, Lot 10, con. 3, Onondaga Township, Brant County, Ont., associated with European relics, and supposed to belong to a period, perhaps as recently as 1700-1750, by the late Prof. David Boyle, see page 94, Report 1903. This pipe, which has a human head, has not been figured before, and is of the same type and material, being of soft limestone with the surface not much weathered and where not weathered the surface has a nice smooth polish. This pipe is in very good condition.

Dimensions, perpendicular height $3\frac{1}{2}$ inches, length of stem measured from outside of bowl, $4\frac{3}{4}$ inches, diameter of stem $\frac{3}{4}$ inch at bowl, tapers down to $\frac{3}{8}$ inch at extreme end, or mouth-piece. The mouth-piece but slightly expanded. Small bowl hole $\frac{3}{8}$ inch in diameter gradually tapering down to the stem hole which has a diameter of $\frac{3}{16}$ inch. The head which projects a little more than an inch above the inside rim of the bowl faces smoker and has eyes nose and mouth well defined. The top of the head is flattened and plain. Weight $4\frac{1}{8}$ ounces.



Mus. No. 25,553.



Mus. No. 25,554.

Pipe, Museum No. 25,554, Figure 8, page 53, Report 1903, is another human headed white stone pipe from the graveyard on the Walker Farm, Onondaga Township (see previous pipe). This one has the longest stem of any stone pipe the writer has examined as yet. Present length $7\frac{3}{4}$ inches, measured to outside of bowl along the line of stem hole. The reason why the writer measures this way is because some pipes have such a curve at the juncture of the stem and bowl that it is hard to tell where one ends or the other begins. This pipe is of the same material as the others though having a more yellowish tinge, resulting probably from having a more polished surface which has suffered very little from weathering.

Perpendicular height 4 inches, of which the head projects about $1\frac{1}{4}$ inches above the inner rim and faces smoker. The head is surmounted by a cap of the "bêret" shape, or else the deep cut above the forehead, extending around to the back of the head pretty well on both sides, denotes a style of flat hair dressing, or a head dress. The face is damaged some, and the features are not very prominent or well designated. The mouth being a mere slit. The nose is gone, the eyes being the best represented, the ears are very slightly represented, being probably worn off.

The bowl is so carved as to show a portion of the back, with the conventionalized arms resting on the breast and being bent up under the chin as if supporting the head, the hands or fingers are not shown.

The bowl is rectangular in upper cross section. Inside measurement of orifice being $11/16$ by $13/16$ inches. Depth $1\frac{1}{4}$ inches to small hole drilled to meet the stem hole which is $3/16$ inch in diameter. The stem is $3/4$ inch in diameter at the bowl, tapering to $3/8$ inch at the mouth-piece. The end is damaged. The base of the pipe shows that the body was terminated there with slight indications of conventionalized legs. Under a glass the stem shows longitudinal striations of a polisher, whilst the exterior of the bowl shows other tool marks. Weight 6 ounces.

Somewhat similar pipes in clay have been observed. See Reports.



Mus. No. 25,578.

Pipe, Museum No. 25,578, Figure 9, page 54, Report 1903, is still another white stone stemmed pipe from a grave on the Walker Farm, with a human face in front of bowl facing away from the smoker. The top of the bowl above the

face is fashioned into a narrow brimmed flat-topped hat, giving the pipe a very modern look. The face is very well carved and the features are well marked and more rounded than usual; the nose is large, the mouth is small with raised lips, the eyes are deep, narrow slits, the ears are represented by slight oblong projections. The hair is denoted—or rather a method of hair dressing—beneath the hat on the side of the bowl towards the smoker. Each eye is encircled by a ring of small dots. The forehead is broad and the chin is deep and well shown. The stem is $3\frac{1}{2}$ inches long, and has a diameter of $\frac{9}{16}$ inch at the bowl tapering to $\frac{3}{8}$ inch in front of the swelling of the mouth-piece. The stem hole is $\frac{3}{16}$ inch in diameter. Inside diameter of the bowl orifice $\frac{3}{4}$ inch. Depth of bowl 1 inch to where it is bored with a small hole to meet the stem hole; this method is also shown in other pipes. The bowl shows striæ of a drill, weight $2\frac{1}{8}$ ounces.

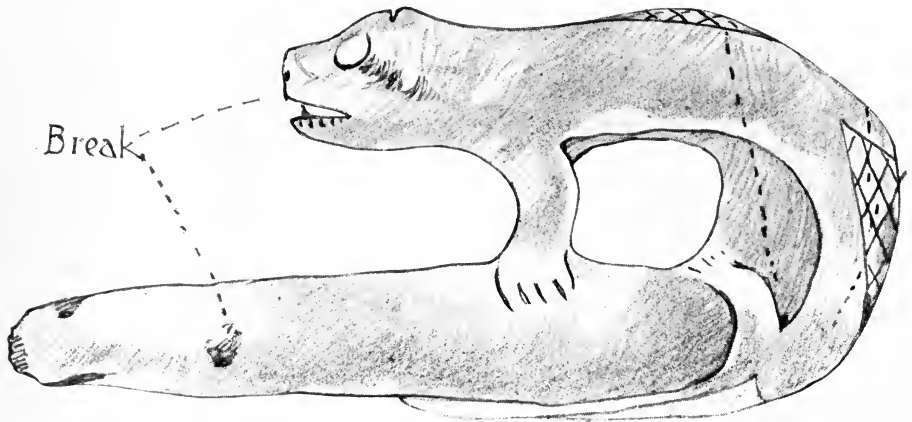
Perpendicular height $1\frac{1}{8}$ inches. The surface is nicely polished and very little weathered. The late Professor Boyle remarks, page 54, Report 1903, concerning this pipe, "one seems to see more of the European in Figure 9 than in the preceding example. To some extent this may be owing to the head dress, but a close examination of the workmanship points to a style of art that is not Indian. This is more clearly observable where a full face view is taken. Looked at in this way, too, it can be seen that although the workmanship may have been performed subject to the white man's influence, the representation is undoubtedly that of some Indian, for surrounding each eye is a circular arrangement of small dots extending from nose to ear, and from middle of forehead to the middle of the cheek, in outline, which in all probability corresponds to the fashion of face paintings adopted by the owner of the pipe."

Referring to these last three pipes. Mr. Boyle also remarks, page 52, Report 1903, "Numerous articles of white man's make were found associated with the stone specimens in these Onondaga graves, but unfortunately we now have no means of knowing whether the graves were all of one period, or of different periods, or whether each grave or only some of the graves contained objects of European origin. Other pipes from the same burial places bear marks that are usually regarded as evidences of European contact; these (pipes) are of a soft white stone scarcely any harder than the indurated clay found near this city (Toronto) and used in the manufacture of terra cotta work. The origin of this material has long been a source of wonder to some of us, and I have for some time been inclined to regard it as stalagmitic."

Mr. W. J. Wintemberg, of the Victoria Memorial Museum staff, Ottawa, Ont., furnishes a sketch and data of this unique lizard pipe, in which the upper part of the lizard is bent over the stem resting on its front legs, which are separate from each other. His description is as follows:

"Animal effigy stone pipe from Lake Medad, Wentworth County, Ont., made of veined yellowish soapstone polished. Catalogue No. VIII-F-80.559, Victoria Memorial Museum, Ottawa, Ont. It is $4\frac{5}{8}$ inches long, $2\frac{1}{8}$ inches high, and its extreme width at bowl is $1\frac{1}{16}$ inches. The eyes and nostrils are indicated by holes. The ears are slight projections; the lower lip is notched. There is a shallow longitudinal groove about $\frac{5}{8}$ inch long and $\frac{3}{16}$ wide along the chin. The toes of the forefeet are indicated by short upright notches, the toes of the hind feet are also faintly shown. On the side opposite the one shown, by oblique

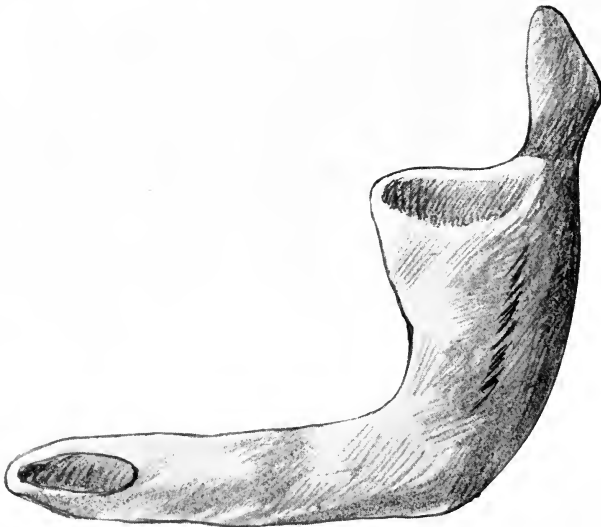
lines coming together at the top, thus M. The back is triangular in cross section. Bowl hole a little more than $\frac{3}{4}$ inch in diameter and about $1\frac{5}{8}$ inches deep. Triangular spaces filled with cross hatching on back above bowl hole, behind bowl



Cat. No. VIII.—F 8,559, Vic. Mem. Mus.

hole, and on tail. Slight breaks on stem, head, and bowl. Stem notched for teeth."

This is the first long stemmed pipe of this type made of steatite, from Canada noticed by author.



Cat. No. VIII.—F 8,551, Vic. Mem. Mus.

Mr. Wintenberg also furnishes sketch and data of another Wentworth County lizard long stemmed pipe in the Victoria Memorial Museum: "Made of soft limestone, much weathered, from Barton Township, Wentworth County, Catalogue No. VIII-F-8,551. It is 3 inches long, $2\frac{1}{2}$ high and $\frac{7}{8}$ in diameter across bowl. No trace of legs, stem broken, bowl hole conical $\frac{5}{8}$ inches in diameter, and $1\frac{1}{4}$ deep."



Cat. No. VIII.—F 8,552, Vic. Mem. Mus.

Mr. Wintenburg also furnishes sketch and data of another long-stemmed, white-stone, lizard pipe from the shore of Lake Baptiste, Herschell Township, Hastings County, Ontario, now in the Victoria Memorial Museum, Ottawa.

“Much of the polished surface is scaled off. The legs are still plain on the side shown in the outline sketch. The projection intended for ears still recognizable, but the head otherwise badly weathered. Length, $5\frac{1}{8}$ inches. Height, $3\frac{3}{8}$ inches. Diameter of bowl, about $1\frac{1}{8}$ inches. Diameter of bowl aperture, $\frac{3}{4}$ inch. Depth, about $\frac{3}{4}$ inch. Tail along bottom faint. Catalogue No. VIII-F-8552, Victoria Memorial Museum (Hirschfelder collection). ”

THE BEAVERTON STEMMED LIZARD PIPE.

This fine specimen was owned by Mr. George Proctor of Beaverton in 1902. Was found by him on the east shore of Lake Simcoe near Beaverton, Ontario, now known as Ethel Park. Length of stem from bowl to mouth-piece, 2 inches. Height of bowl, $1\frac{1}{2}$ inches. Height of projected head above bowl, $\frac{3}{4}$ inch. Thickness through top of bowl from side to side, 1 inch, from back to front, $\frac{3}{16}$ inches.

The broad, triangular, frog shaped head has projected eyes at the corners. The mouth is defined by a scratch. The forelegs are clasping the top of the bowl. The hind legs are extended along sides of stem and the tail extends underneath stem to nearly the mouth-piece. Length of lizard, about $3\frac{3}{4}$ inches. Cavity of



Beaverton Lizard Pipe.

bowl conical. There are some slight scratches on the surface. Material a limestone or lithographing stone (the latter material occurs as drift in this neighborhood). The extremities of forelegs expand into feet, but the hindlegs are cut off square at the ankles and no hind feet are represented. The tail extends straight as is the usual way, and is neatly worked. The surface of the pipe is smooth but not polished. I doubt if material would take a good polish. (From notes taken in 1902 by the author.) Mr. A. F. Hunter, of Barrie, in a letter of 26th March, 1902, remarks about this pipe: "In the picture (photo) of the lizard pipe the natural creases of the stone show pretty well. I am of the opinion this pipe is intended for an alligator. The granular markings on the stone are just like alligator scales, and the material was probably selected on this account. No other kind of lizard has a hide marked in this way. It is, in my opinion, another case of fitness in the choice of stone for the work intended." This pipe has not been brought to public notice before, and is the only one, so far, that has come to the author's notice, that shows projected eyes.

THE NOVA SCOTIA STEMMED LIZARD PIPE.

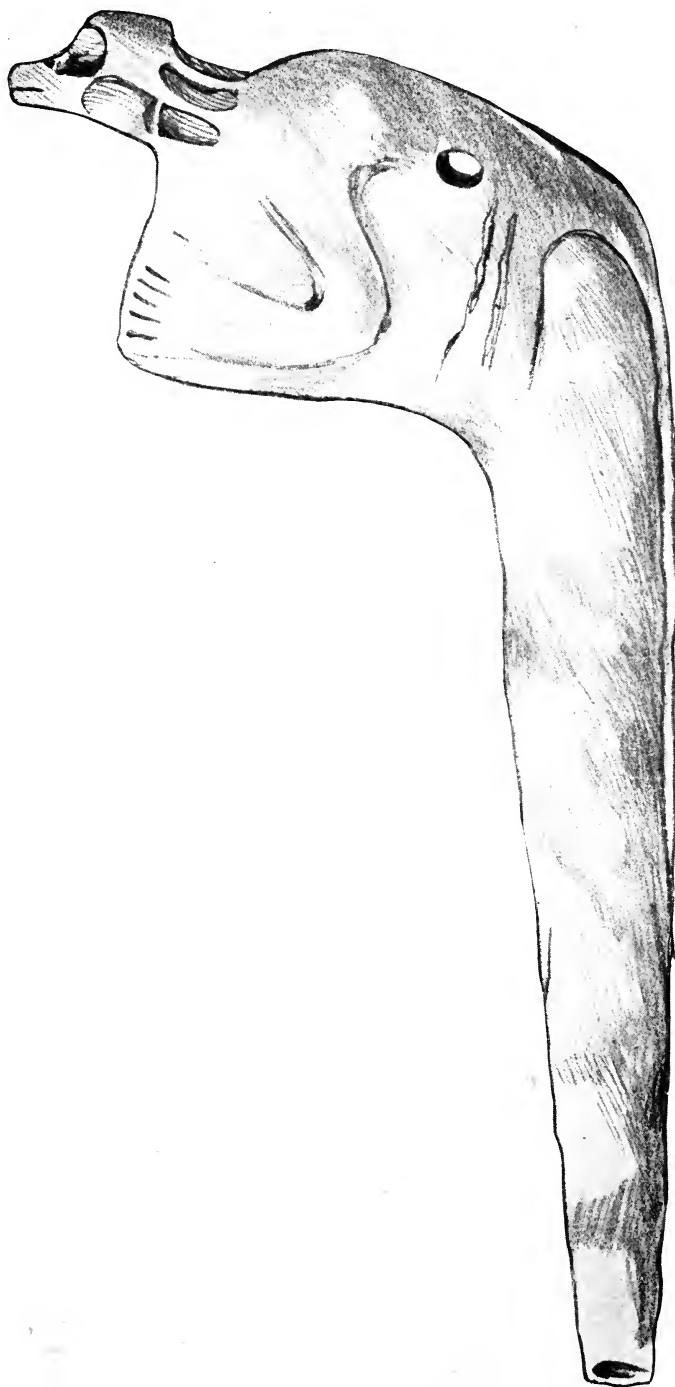
This pipe is described by Mr. Harry Piers in his "Relics of the Stone Age in Nova Scotia," Vol. IX. Transactions of Nova Scotia Institute of Science, 1896, Figure 96, plate 3, and pages 52-55, from which the following extracts are taken: "The pipe is owned by the Hon. W. J. Almon, M.D., of Halifax. The circumstances of its discovery are as follows: In 1870 an upturned copper kettle was unearthed by Mr. John J. Withrow in a piece of woodland to the westward of Upper Rawdon and within ten rods of the line of an old French trail from Shubenacadie to Newport, Hants County. The kettle was about eighteen inches or two feet under the surface. Beneath it were found this stone pipe, two iron tomahawks, five or six iron implements much rusted, about seven dozen oval blue beads, large size, a beaver tooth; no human bones. These relics were obtained by J. W. Onsley, of Windsor, from whom Dr. Almon obtained the pipe. The lizard is placed with its ventral surface on that side of the bowl farthest away from smoker. The fore and hind legs clasp the bowl while the long tail lies upon lower side of stem. The broad head extends up beyond rim of bowl. Two dots at the extremity of the somewhat pointed snout represent the nostrils. The mouth is closed and reaches around to side of head beneath the eyes. The latter are represented by large well defined circular cavities. Across the back of the neck appear a row of five elliptical cavities, their greatest length being in the direction of length of body. The long forelegs are bent upwards at right angles and the toes rest on the side of the bowl's rim. Incised lines divide the forefeet into rather long toes, seven of which are on the right foot. The hind legs are shorter, slightly broader and are gradually lost in the contour of the bowl, without any indications of toes. A longitudinal line extends from the thigh to the vicinity of the hind foot. A round hole about $\frac{1}{4}$ inch in diameter is drilled from side to side of bowl at the ventral surface of the lizard and just anterior to the hind legs. This hole was probably used for suspension purposes. The rim of the bowl is decorated on top by groups of from four to seven incised radiating lines. The bowl is nearly circular and is 1 inch in diameter, tapering downwards for about $1\frac{1}{2}$ inches, where it is suddenly constricted to about the size of a lead pencil, extending further nearly an inch until it meets the stemhole. The total depth of bowl equals nearly $2\frac{1}{2}$ inches. One side of cavity is continuous with the neck. Length of stem to side of bowl nearest smoker nearly 5 inches. Diameter of mouthpiece, .4 of an inch, and at the further portion near the bowl a trifle more than an inch. Diameter of perforations at mouth end is .28 inches. The bowl rises 1.80 inches above stem. Thickness of bowl at thinnest part .17 inch. Taken generally the whole pipe may be said to be about 7 inches long, but from mouth piece to tip of snout it is 7.60 inches.

The entire specimen is in a very excellent state of preservation and without a flaw. Material fine gray stone different from any found in Province (N.S.). It bears a fine polish. A short tube of wood may have served as a mouthpiece, as no teethmarks are observable upon the stem.

It is a unique specimen in this part of the Dominion and is considered not to be the work of Micmacs, but probably came into Nova Scotia as a trophy of war or else of trade."

The fact of this pipe having these slots on its neck connects it with the effigy pipe makers of the Iroquois-Huron districts, in which the use of slots in effigy pipes of stone is a pronounced feature.

The figure of this pipe is given actual size. The total length of lizard being about 7 inches.



Nova Scotia Lizard Pipe.

The pipe is deposited in the Provincial Museum of Nova Scotia, at Halifax, as Accession No. 389.

Mr. Harry Piers, curator of above Museum, in letters of 12th March, 1914, and 4 Sept., 1914, gives the weight 11 oz. and the material as a light gray stone, very fine grained, either pipestone (?) or a rock closely resembling it. Pipe highly polished.

DR. C. RAU'S LIZARD PIPE.

The description and figure of Dr. Rau's pipe is from Smithsonian Contribution to Knowledge, Vol. XXII, No. 287, Washington, 1876, cut 192, in his "Archæological collections of the United States Nat. Mus."

Note on above by Dr. Rau: "Some of these . . . exhibit elegant outlines, almost reminding one of a cornucopia. The length of the neck in some of the specimens and their narrow bore seem to indicate that they were smoked without separate stems, like the common clay pipes now in use, in which the bowl and stem are united (continuous). A very beautiful, highly polished, steatite pipe of



Pennsylvania Lizard Pipe—by Dr. C. Rau.

the collection carved in imitation of a lizard (Figure 192, Pennsylvania). The straight neck or stem apparently forms the animal's tail, and its toes are indicated by incised lines."

Mr. A. F. Hunter, in letter of March 26th, 1914, says: "The art of engraving at the time (1876) this cut was made was not advanced enough to bring out the incised lines indicating the lizard toes."

Length of this pipe is about $4\frac{1}{2}$ inches. The wood engraving of the pipe by Rau is very poor and leaves one in doubt as to whether the legs and tail of the lizard have been much worn down or only slightly delineated.

This is the second steatite, long stemmed pipe noted so far, of this type.

We are indebted also to Mr. H. Piers, letter 25th March, 1914, and Mr. W. J. Wintenburg, letter 23rd March, 1914, for information re this pipe.



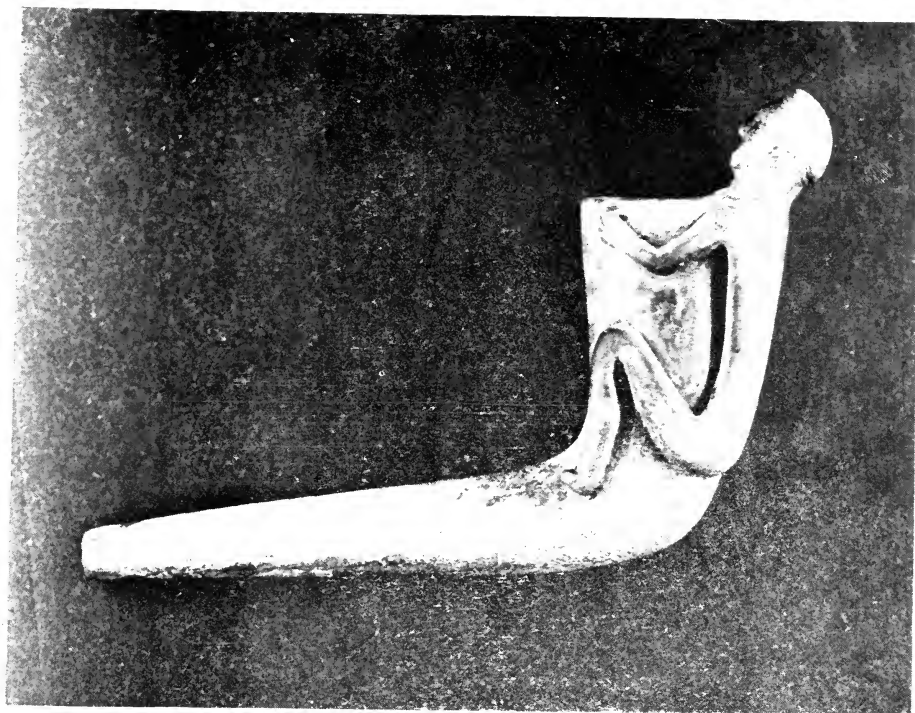
Iroquois Pipe—Pennsylvania.

IROQUOIS PIPE.

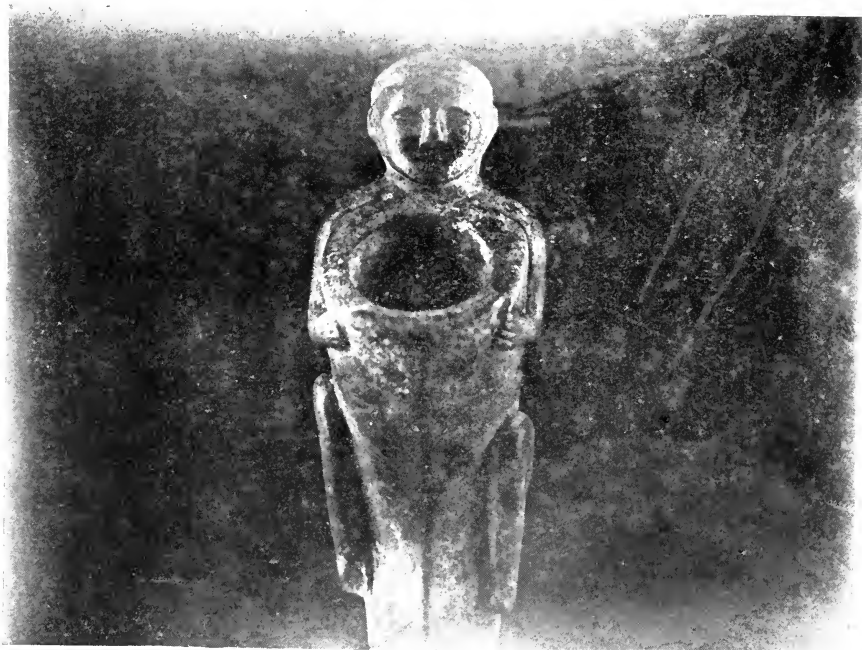
Dr. T. B. Stewart, of Lock Haven, Penn., has one of these long-stemmed pipes from the Susquehanna Valley, supposed to be of Iroquois origin, material clay state of a light drab color, identified by the Smithsonian Institution. The pipe is very highly polished and is 6 inches long and $2\frac{1}{2}$ high. The stem is round and the bowl has greatest diameter from side to side. The head surmounting bowl probably represents a horned owl. The *Archæological Bulletin*, June, 1911, Vol. 2, No. 3, page 78, says: "The character of the head is somewhat doubtful in profile, as much like a fish as anything, but a front view shows two short ears, and it very likely represents some animal's head, or perhaps a bird head."

The square portion of the top of the bowl with groove is a Huron--Iroquois design and occurs in clay pipes even in this section (Victoria County, Ont.)

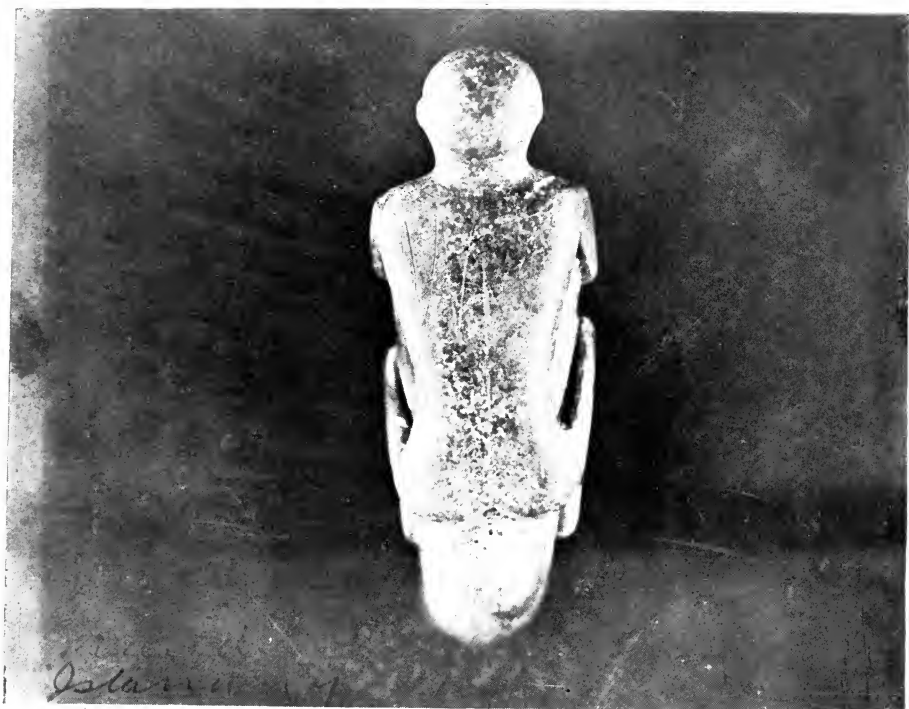
The pipe was found in a grave, Oct., 1909, near a large village site at Big Island, two miles east of Lock Haven.



Human Figure Pipe—side. Grand Island, Niagara River, N.Y.



Face View.



Back View.

HUMAN FIGURE, LONG-STEMMED PIPE. (BUFFALO, N.Y.)

This pipe was taken from Grave 27, Van Son Farm, north end of Grand Island, N.Y. (Niagara River), by Mr. Frederick Houghton. With it were glass beads and a bone comb, see page 383, Vol. 9, No. 3 Bulletin, Buffalo Society of Natural Sciences, Mr. Houghton's article entitled "Indian Occupancy of the Niagara Frontier." In a letter of June 17, 1914, Mr. Houghton says this is undoubtedly Neuter.

The photographs of this pipe were furnished by Mr. Wm. L. Bryant, custodian of Museum, Buff. Soc. Nat. Sci., who says, in a letter of June 23, 1914, that "on the back (of effigy) there are incised lines evidently indicating a tattooed ornament."

This pipe is figured on Plate 3, Figure 137, Vol. 9, No. 3 Buff. Soc. Nat. Sci. Bulletin, and on page 316 it is described as being a beautiful carved marble pipe, was excavated with a number of skeletons and relics, both European and native, from a knoll on the Van Son Farm, in July, 1909.

The effigy holds the bowl between its arms and legs. The latter being acutely bent at the knee, with the head thrown slightly back.



Wooden Lizard Pipe—Victor, N.Y.



Probable appearance of pipe when new.

WOODEN LIZARD PIPE.

This pipe was taken by Mr. Fred Houghton from Grave No. 13, of the Seneca town of Ganagora (1681), in Victor, Ontario County, N.Y., associated with metal tools—see page 437, "The Seneca Nation from 1655-1687," by Fred Houghton, Vol. 10, No. 2 Bulletin, Buff. Soc. Nat. Sci. Also letters from Mr. Houghton, Jan. 14 and June 19, 1914.

Mr. H. R. Howland, Supt. Buff. Soc. Nat. Sci., in letter of 16th June, 1914, says: "The bowl is of wood lined with brass, and small pieces of brass are inserted for decoration, as shown in the drawing."

Mr. Howland had a drawing made showing what the probable appearance of the pipe was when it was new, which was photographed, also the actual remnants of the pipe itself were photographed, both photographs being reproduced here.

Mr. Howland elsewhere remarks that Ganagora was a Seneca village destroyed by the Marquis de Denonville in 1687, and that it was probably the Jesuit Mission of St. Jacques, and that the Senecas had been in contact with trader influence since 1657, also that he had never before seen a lizard figure in connection with Iroquois influence. This pipe shows that the lizard idea survived to a later date, and is introduced here for that purpose. In Mr. Houghton's letter of June 14th, 1914, he describes this wooden pipe as being preserved by the brass lining of the bowl. The lizard was well shown as crawling up over the pipe bowl, its tail lying along the stem. This pipe is in the museum of the Buff. Soc. Nat. Sci.



Specimen Museum, No. 9,801, Figure 2, page 49, Report 1903, is undoubtedly one of these long-stemmed pipes in process of manufacture, of which Mr. Boyle says, pp. 48-49, Report 1903: "There can be no doubt that this unfinished piece of work, Figure 2, was intended to be a pipe, and there is just as much certainty that the workman's purpose was to model some kind of animal's head on edge of bowl overlooking stem. It requires only a slight examination to conclude that before any work was done on this piece of limestone it was in pebble form, perhaps sufficiently irregular in outline to suggest the bowl and stem of a pipe, but, in any case, just a water-worn stone. Notwithstanding the extremely rough nature of the chipping an enormous amount of work has been performed, too, in a purely primitive way; on this specimen there is not a mark to indicate the use of any tools other than those of stone. Some of the flakes were very large, as may be seen by the scars on the diagram, and it may have been an attempt to strike off one of these that caused the fracture at the neck of the stem.

The pieces were found a hundred or more feet apart, and one piece a long time after the other. The former circumstance is suggestive of some "temper" on the part of the man whose unlucky blow spoiled his work.

For this instructive specimen we are indebted to Mr. W. G. Wright, who found it in the Township of Nottawasaga.

The saw-cut near the top of the intended bowl, and which extends nearly as far round as the other side, was clearly made with some cherty or other silicious tool, perhaps only a flake, either held directly in the hand, or in some way attached to a handle. If, then, we regard the quality of the stone, the character of the workmanship, the intention to make a carved pipe, and the design of forming some kind of figure on the bowl, we have all the conditions of a primitive nature that we may, and do usually, suppose accompanied a purely paleolithic method of working, and it is difficult to conceive an Indian workman proceeding in his simple way to form a pipe in imitation of some European model, as has recently been asserted he did."

This large and massive specimen may be said to be in the primary stage of chipping, as it shows a good deal of the natural surface on both sides, and was evidently in its original form one of those large flat, oval limestone pebbles that occur in places throughout the country.

Dimensions— $8\frac{3}{8}$ inches long, measured from tip of stem to outside of bowl; perpendicular height, $5\frac{5}{8}$ inches, of which $1\frac{1}{2}$ inches were evidently intended for the head. The specimen has almost a uniform thickness of $1\frac{3}{8}$ inches. The depth of bowl back to front $2\frac{1}{4}$ inches. The thickness of stem from top to bottom about $1\frac{3}{4}$ inches. One can judge the amount of work necessary to trim this pebble down to make a long, slender-stemmed pipe and bore the stem hole. Looking at the specimen one would think that it takes more work and care to complete the stem than the bowl. It is somewhat of a mystery to me yet how the stem holes can be bored in these pipes, though I have heard of half a dozen primitive ways. Material light gray limestone, seemingly non-stratified. There are no evidences of pecking or polishing, the specimen showing only primary chipping and sawing. The natural surface on both sides of pipe being smooth, as if water-worn. Weight 1 lb. 2 oz. Avoir., which no doubt would be much reduced when pipe was completed, probably 50 per cent.

NOTES

Rev. Dr. Wm. M. Beauchamp, on p. 170, *American Antiquarian*, Vol. XII, No. 3, 1890, in an article called "Comparison of Relics of Ontario and New York," speaks of two curious slender "white stone" pipes, very slender for stone—a head projecting from rear of bowl—and are much like some of the larger clay pipes in form, differing only in material; one is 5½ inches and the other 7¼ inches from tip to tip. The former was found in Hamilton, Ont., and the other at Lake Medad. These may be the two first long-stemmed pipes figured in this paper.

F. W. Waugh, p. 76, Report 1902, in "Neutral Village Sites in Brant County," mentions several pipes of light-colored stone having long, slender stems and bowls, and figures carved on the front—one, a small stone pipe, had a lizard-like animal clasping the bowl, described as coming from an ossuary on site 5, Walker's Farm, lot 10, con. 2, Onondaga Township, and puts the age of this site 250 years or more, as the Neutrals were wiped out by 1652 or 1653. White man's relics (of metal) were found in ossuary. These are the pipes figured and described in this paper as coming from the Walker Farm.

In reply to a query *re* effigy pipes as regards modern Western Indians, Mr. H. C. Fish, Curator of State Historical Society, Bismarck, North Dakota, in letter of 14th May, 1914, says: "With our Indians out here these different effigy pipes are not the representation of different animals, or to represent man, but they are the animal soul or man soul. They are the suggestion of the great animal or man soul, or the conception of the inner life rather than the effigy of any particular animal or man. To our Missouri Indians it is rather psychic than material."

Letter of April 17th, 1914: "We do not have in the museum any pipes with the lizard effigy. The lizard is very uncommon out here. . . . and I suppose they (the Indians) would use in their carvings and symbols those things which were common with the country."

Letter of April 22nd, 1914: "This morning Red Bear and Young Hawk, with their interpreter, were in the office, and I asked them about the old pipes which were carved in the olden days. They said that they carved the deer head, the elk head, the horse head, the buffalo head, the wolf, the bear holding the pipe bowl in its arms, and they used the snake for the stem of the pipe. They had never seen any pipes with the lizard on, and did not know what the lizard was; that the men carved the pipes to suit the individual tastes, to show the totem of the tribe and to give homage to the Great Spirit for food and game. These Indians were of the Arikara tribe at Berthold, northwest of here."

In answer to a query *re* effigy pipes, Mr. A. McG. Beede, a missionary who has been with the Sioux many years (32), in letter of April 16th, 1914, states: "As to effigy pipes, if you find one (fish or lizard) in Missouri or the Dakotas (or still further southeast), be sure it was imported. On pipes and canes (?) the snake is common (or part of a snake). Formerly rattle-snakes were far east of the Missouri, but lizards were seldom seen; elks and buffalo were used by the Western Sioux, and bears (instead of buffalo) by the Middle Sioux. Fish were sometimes, but not often, on articles of Missouri River Indians (Middle Sioux, Mandans, Hidatsa, and Arikara). I never saw any tendency to fish or lizard ornamentation among the Assiniboinés. These ornaments seem to coincide with the creatures in the country of a people. The names of persons show the same tendency; for instance, the Middle Sioux and other Missouri River Indians have 'Bear' as a name, which is replaced by 'Bull' (Buffalo) in Western Sioux."

Clarence B. Moore, Philadelphia, Pa., in letter of May 11th, 1914, does not know of any lizard pipes from Pennsylvania, or from the South.

W. C. Mills, Curator Ohio State Archæological and Historical Society, Columbus, Ohio, in a letter of June 10, 1914, remarks that they can duplicate almost any of the pipes mentioned in 2nd paper, Report 1913, but for the most part they are much larger, and somewhat different in character, and that a pipe was lately found at Newark, Licking County, Ohio, which is similar to the bear pipe on p. 41, Report 1913, but is remarkable in this, that it is a human effigy pipe; over the head of the effigy is placed the head of a wolf or a bear, showing that it was a head-dress. (Note by Author: This fact also occurs on a small, oblong, soapstone pipe from Bexley Township, Victoria County, Ont., having a human face surmounted by an animal's head; see Report 1906, page 26, Fig. 12.) They have a few lizard pipes in Ohio, and also the lizard effigy is found on some pottery; see Report on Gartner Mound and Village Site, by Mills.

J. H. Paarmann, Curator Davenport Academy of Science, Davenport, Iowa, in letter of 15th June, 1914, states that they have none of the types of effigy pipes under discussion (2nd and 3rd papers) in their museum.

Referring to Bird Pipe, Fig. 103, Bull. Polished Stone, N. Y. State Museum, which is reproduced on page 64, Report 1913, and also in "Comparisons of Relics of Ontario and New York," in which Mr. Beauchamp says on page 169, No. 3, Vol. XII, *American Antiquarian*, 1890: "I made a drawing of a fine bird pipe from the Oneida River, New York, the material being stone, the crested bird resembling a woodpecker. . . . I was gratified to find its counterpart in Toronto, although in a battered condition. There could be no doubt of their being made by the same hand, but like many other stone pipes this was done after the introduction of iron tools." Mr. A. C. Parker, N. Y. State Archæologist, remarks in a letter of 20th June, 1914: "I note that you cite Dr. Beauchamp's view that the best pipe of this sort that he has seen seems to be of modern manufacture. At present we have this pipe in our museum, and I have studied it with some care. There is nothing about it which would indicate the use of steel implements as far as my opinion has weight. The pipe is nicely worked, but all the incisions might easily have been done with a sharp flint, as experiment will show. The drilling for the stem hole and bowl are both conical, just as the apparently older forms are, but this drilling seems to have been smoothed with some fine abrasive and later polished. I am thus inclined to take issue with Dr. Beauchamp in his belief that the pipe is of modern manufacture and am inclined to believe that the doctor would be willing to admit that his statement was debatable."

Also referring to the Silverheels Owl Pipe, p. 62, Report 1913, which is from a site stated to be Eriean, Mr. Parker in same letter further explains: "Referring to my statement about the Silverheels owl pipe from Brant Township, Erie County, N.Y., Mr. Harrington and myself, after a considerable debate, involving field research, came to the conclusion that the site and the greater portion of the artifacts were not Erie but probably the remains of a Seneca settlement, made after the destruction of the Eries. At the time our original excavation was conducted neither one of us had the extensive field experience to draw upon in forming our conclusions that we now have; thus the owl pipe we have concluded was interred by Seneca hands. . . . My investigations lead me to believe that pipes of this character are Iroquoian, or, as might be better termed Huron-Iroquois. I have never found one of these pipes, or even a fragment of one, on a purely Algonkin site. The Algonkin pipes are entirely different and few if any ever rise to effigy forms, except the more modern forms, which are known by such names as 'Micmacs,' etc."

After quoting Mr. Parker as per above, it is only fair to quote also from Mr. Beauchamp, referring to the sketches reproduced in the 2nd paper on effigy stone pipes in 1913 Report in particular, and to this class of effigy pipes in general. Letter of 25th June, 1914, says: "If I had supposed my drawings were to be reproduced I would have been more exact in details. They are correct in form and markings, but borings are not made exactly circular, nor did I shade them so as to show the exact minor curves. I am inclined to modify my opinions of age for several reasons; the sharpness of boring can be accounted for and is perhaps no sharper at the surface than in many ceremonial objects. The material is a strong point, for while not invariably of ornamental slate, some are made of choice specimens of that, naturally inclining me to place them with the banner stones, amulets, gorgets and tubes of quite early date. Perhaps a yet stronger point here is that they never have been found here, according to my experience, on any distinctly Iroquois side. Mr. Parker (page 67, Report 1913) speaks of their occurring side by side with Iroquois clay pipes, which strikes me as merely a general statement. On camp sites I find several periods represented, but not in villages and forts. There is one striking difference between these and the early clay pipe—in the latter the face is usually toward the smoker; in the latter it is always the reverse. This, of course, would imply a distinct period, early or late. In regard to the lizard type, in its broad sense I have seen about a dozen here (N. Y. State), all but two of clay."

Mr. Christopher Wren, of Plymouth, Pennsylvania, Curator of Archæology, Wyoming Historical and Geological Society, of Wilkesbarre, Pa., in reply to query *re* effigy pipes, states in a letter of June 19th, 1914: "We find nothing here, so far as I know, in the line of pipes which at all resembles the designs of those you illustrate (Report 1913). . . . Some fine soapstone pipes are found here with animal figures or the human head and face on them. . . . the lizard is a favorite figure on such pipes."

Again in letter of July 1st, 1914, in response to further inquiries: "I know of no pipes in this region (Wyoming Valley, Pa.), showing the entire human figure. Pipes with the human face (portrait pipes) are occasionally found here, but may be called very rare. I have seen a few of them made of soapstone, and more commonly of clay."

In discussing the use of the human figure as an embellishment by the Indians, Arthur C. Parker expressed the opinion that they refrained from doing so, perhaps, because of their peculiar ideas that a representation of any living animal took on some of the characteristics of the things copied, and might be hurtful to the original."

Mr. Alanson Skinner, Assistant Curator American Museum Natural History, New York, N.Y., in reply to queries regarding effigy pipes and lizard pipes, in letters of September 9th and October 6th, 1914, says that they have not a single pipe of the effigy type described in Report 1913, from either the United States or Canada, in their collection, and that they do not find this type at all in the territory of the New York Coastal Algonkin, and that none of their clay and stone animal pipes from Central New York fill into the described types; also that they have no lizard pipes from either side of the border.

Mr. Jas. A. Branegan, Philadelphia, Pa., letter 24th November, 1914, says that they have nothing like these pipes in Pennsylvania, which I take to mean not in the part that he has archæological knowledge of.

Mr. A. McG. Beede, Hekton, N.D., in a letter of Jan. 12th, 1915, states as follows: "The statements made to you by me at first regarding effigy pipes were too cautious and restricted. The Hunk-pa-ti Sioux, living along the Missouri, had plenty of lizard, alligator pipes in the old times. The Teton Sioux had these to some extent, but I am not yet certain whether they made them themselves or purchased them from the Hunk-pa-ti. Yesterday an old Indian woman said she had seen, in old times, deer femur bone pipes with lizards carved on them. I never saw such pipes. I have found an ashwood calumet old pipe with a lizard carved on it, and painted. . . . At a later date came the bear and buffalo effigy pipes. And then pipes with horses and mules on them—the mule and his rider being one person in the carving."

CERTAIN OJIBWA MYTHS.

By COL. GEO. E. LAIDLAW

The first of these following tales was told to me some eight or ten years ago by Ben Simcoe, an elderly Indian from the Rama Reserve, Ontario County, near Lake Couchiching, and is probably a modern version of an older tale, as it introduces the negro and white man. The word "He" in the story stands for "God" or the "Creator." I could not get definitely from Simcoe whom it did stand for. He seemingly did not know much about earlier Indian beliefs and conditions.

The remaining three stories were told to me this summer by Jonas George, Chippewa, of Rama Reserve, aged about sixty-four, professed Christian. His Indian name is Wash-a-ghe-zik, which means "A clear day."

G. E. LAIDLAW.

The sketch of the two little shiny men setting lightning at the tree, also the "Monster," were drawn by Wash-a-ghe-zik.

G. E. L.

THE CREATION OF MAN.

Told by Ben Simcoe, Chippewa (Ojibwa), of Rama Reserve, Ontario County.

He (the Creator) took some clay and made a man. He baked it; it was not done enough. He threw it away; it was no good. This was the white man.

He took some more clay and made another man and baked it. This one was baked too much, and was burnt. It was no good. He threw this away. This was the negro.

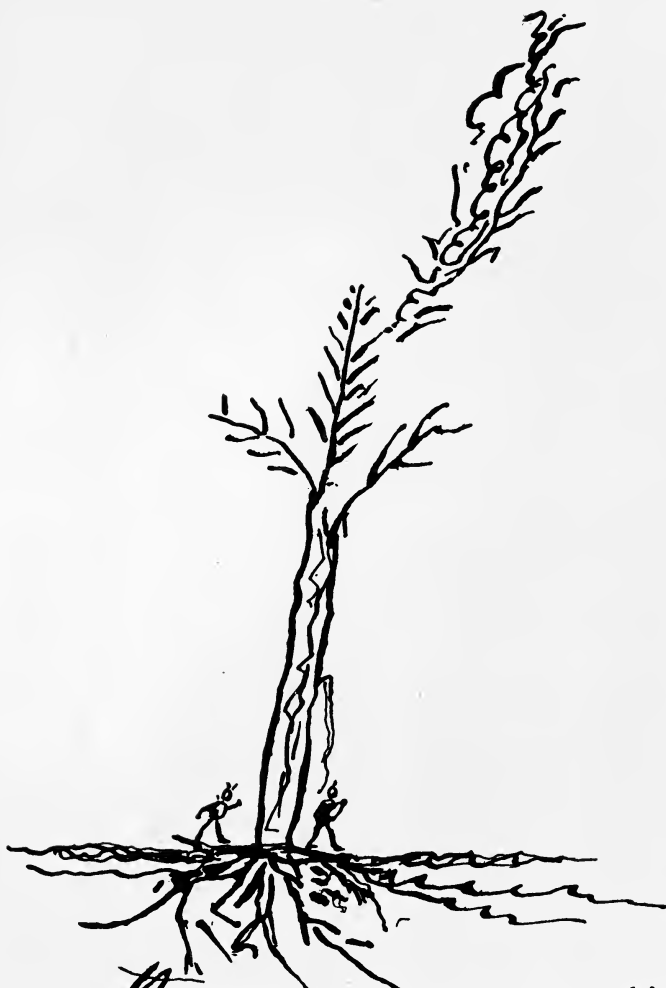
He took another bit of clay and made a third man. He baked this and it came out all right. It was just right. This was the Indian, better than the white man or the negro.

THUNDERBOLT.

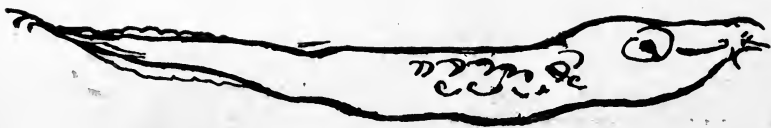
This story was told to Wash-a-ghe-zik by his father, and was told to his father by his grandfather.

A young Indian, many years ago, went out to hunt early one morning, and coming on noon he got hungry and started back to camp. In passing a pine stub that had been struck by lightning he saw "something" sticking in the tree where the lightning hit. He pulled this "something" out and looked at it. It was about two fingers broad, and about one hand long. He put it back again in the tree exactly like he found it, and went on. When he came to camp he told his father about it, and his father and several other men, together with the young man, went back to examine it. Neither his father or the men with him could pull this "something" out, but the young man could; so he pulled it out, wrapped it up and took it to camp. This "something" would tell the young man some hours before a storm came up that the storm was coming, so that the Indians could make camp. The young man used to dream that he could split trees by pointing this "something" at them, but never tried it. He kept this for many years. He was about eighteen years old when he found it, and lived to be forty-seven. He died unmarried and his name was forgotten.

The "something" was shiny and quivering, and nobody knew what it was made out of. It was lost shortly before the man died. Wash-a-ghe-zik had no name for this "something," and said the Indians could not make up a name for it.



Those men. sent. the
light. long at
the pine tree



MONSTER.

NIM-MAH-KIE.

Once, a long time ago, before the white man came to Canada, an Indian struck out through the bush to hunt. It came on a storm and he took a line for camp, which was by a little lake away up north. It came on worse, and the Indian crawled under a projecting pine tree. He saw the lightning strike several trees, and looking very closely at one tree that was struck he saw a little man (about two feet high) standing by one side of the tree, and looking again at the tree he saw another little man standing at the other side of the struck tree. Both these men were fine little fellows, all black and shining, and are called Nim-Mah-Kie (Thunder). They climbed up in the air like they were climbing ladders, and disappeared. After they went up more lightning came down. These little men set the lightning at the trees and make the thunder. Thunder and lightning keep the monsters down on the land and in the lakes.

MONSTERS.

These monsters, which are about twelve feet long and about one and one-half to two feet thick, and which have long jaws full of teeth, and look like half fish and half snake, live in hills near lakes. They have underground passages from the hills to the water, and can sometimes be seen early in the morning. In small lakes and bays of larger lakes they move around with great swiftness, forcing the weeds and floating sticks, etc., up high on the shore, similar to swirling your hand around in a wash basin. Sometimes they do this with so much force that they leave the small lakes partially dry. One of these monsters lives in the hill just north of where the old Indian portage from Lake Simcoe enters West Bay, Balsam Lake (now Portage Road). Another lives in the hill at Atherley, Rama Reserve, Lake Couchiching, and another lives up north in a lake the name of which is now forgotten. Thunder and lightning kill these monsters.

NEW ACCESSIONS TO MUSEUM

When the first explorers and pioneers from the old world pushed their way up the Ottawa, Mattawa, and down the French River into the mysterious forests of the Tionnontates country, they found there a red-skinned race, who were possessed of remarkable moral and physical attributes. They were extensive cultivators of tobacco, as well as large traders in the same with numerous northern and western tribes. Many evidences of their smoking habits are traced in the pipes found in their kitchen-middens, and surface finds are also numerous, most of which, however, are imperfect. On page 82 and 83 are illustrated at a number of Tionnontate clay pipes found in the township of Nottawasaga. All these pipes resemble very closely those of the Iroquois, Attiwandarons, and Hurons, as found in the state of New York, as well as through the Province of Ontario. The square Iroquois pipe, as well as the bell-shaped Attiwandaron, are both found throughout the Tionnontates country. Stone pipes are not so numerous, probably due to the fact that the territory had not been occupied for so long a period, but all stone artifacts are less numerous in this district.



Fig. No. 33,989. Full size.

Figure No. 33,989 was presented to the Museum by T. R. Mayberry, Esq., M.P.P., and was found on Lot 16, Concession 3, W. Oxford. It is a very dark stone pipe with a flattened stem, somewhat after the monitour types.



Fig. No. 33,902.

This pipe, No. 33,902, in the Kennedy collection was found on the 7th Concession of York Township, north of Weston, and is a typical form found all through the Huron-Iroquois district, and made an excellent model for the Europeans to copy from.



Nottawasaga Pipes.



Nottawasaga Pipes.



Fig. No. 34,037. Full size.



Fig. No. 34,047. Full size.

Figure No. 34037, a banner or wing-formed stone from Middlesex Co. and bears the appearance of age and may have antedated the Attiwandaron occupation of Western Ontario.

No. 34047 is an excellent specimen of an ice-chisel (*trauche*). It is heavy and brought to a sharp point at both ends, probably made use of in the north country by the Indians during their hunts for beaver. The handle was fastened to the centre in the usual fashion, thus making an excellent ice-breaker for piercing holes in the lodge into which the animal goes for refuge, and through these holes laying their nets for the purpose of catching them.



Fig. No. 34,038.

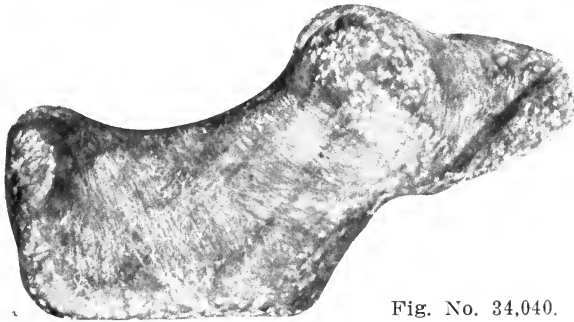


Fig. No. 34,040.



Fig. No. 34,039.



Fig. No. 34,041.

These figures, No. 34038-39-40-41, which have been usually designated "bird amulets," were presented to the Provincial Museum by John Grayburn, Esq., and were all found in the County of Middlesex. Figure 34040 is poorly made and looks as if it had been only partially finished, or else that fire and weather had defaced it. The others have the protuberances known as eyes and the usual boring at the extremities of the base. Few of these artifacts are found in the country of the Tionnontates, the large majority coming from south-western Ontario.



Fig. No. 34,032.

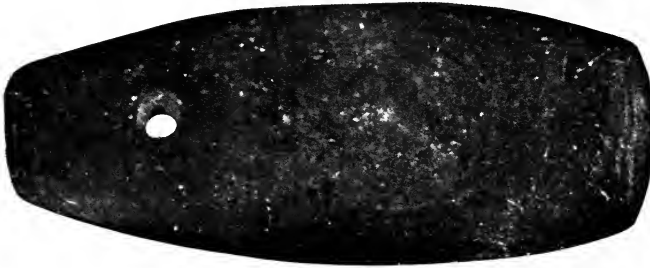


Fig. No. 34,031.

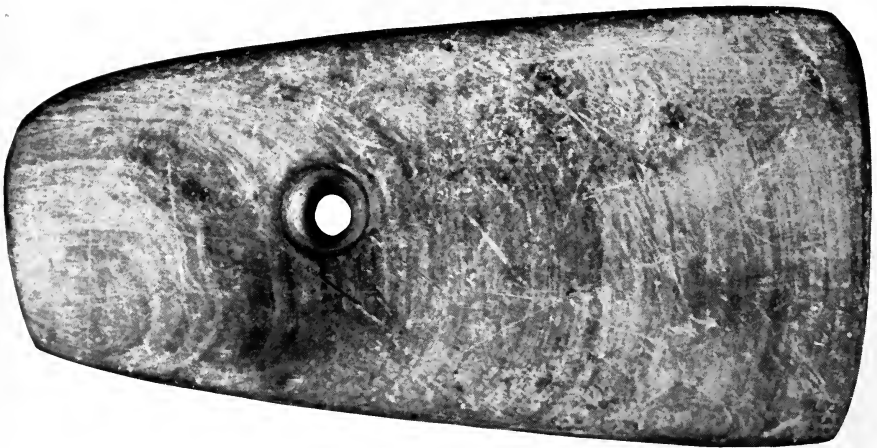


Fig. No. 34,030.

Figures 34,030-31-32, commonly known as ceremonial stones, are the gift of Mrs. John Grayburn, and also from the County of Middlesex. They are the handiwork of the Attiwandarons. No. 34,032 bears the appearance of having been used for a tallying stone, either for gambling or other purposes. They are all made of stripped slate, with the hole bored in the usual aboriginal fashion. No. 34,031 is somewhat worn and has the appearance of age. No. 34,030 is a very common form found all through Ontario, and particularly in the western areas of the Province.



Bone. Fig. No. 34,048.



Elk Horn Skin
Scraper.
Fig. No. 33,983.



Fig. No. 33,990.

This unique bone artifact (No. 34,048) was found in an ashbed near Weston, and was presented to the Museum by Mr. A. M. Kennedy, with his very large collection. It is the only bone artifact of this kind in the Provincial Museum, and is $11\frac{5}{8}$ inches in length with a round sharp point at one end and the other flattened. The workmanship is not only perfect, but most regular. The use to which bone pieces of this kind were most probably put is in the game of straws. Charlevoix states that in this game, which generally consisted of 201 pieces, they divided them with a kind of awl, or sharp bone such as this.

This stone artifact (No. 33,990) was presented to the Museum by Mr. C. W. Nash. It is unique in its outline and was probably used as an ornament to decorate the ear or nose of some ancient Attiwandaron brave. It is the only article of the kind we have in the Museum, and it was found in one of the ancient village sites near Queenston.

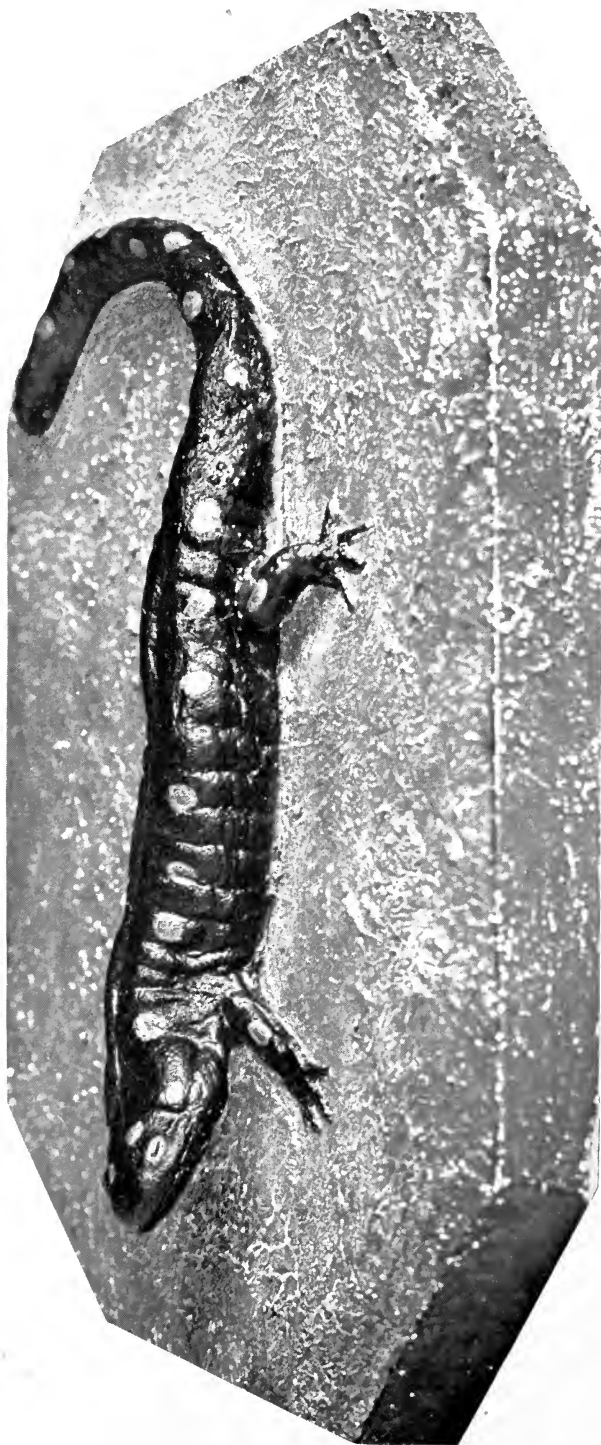
Figure 33,983, an elk horn skin scraper, which is one of four in the Ontario Provincial Museum. It was presented with a number of other artifacts by Mr. E. R. Steinbrueck, of Mandan, N.D., with the attached flint, well laced on by thongs of deer hide, it must have been a very useful instrument. It is 12 inches long— $5\frac{1}{2}$ across the top and $2\frac{1}{8}$ inches in diameter. This scraper was found at Areckara Fort, about sixteen miles from Mandan. After the skin has been cleaned it is worked down with this adze-shaped scraper, formerly tipped with stone, but now with metal. This process reduces the hide to a uniform thickness.

ACCESSIONS TO MUSEUM

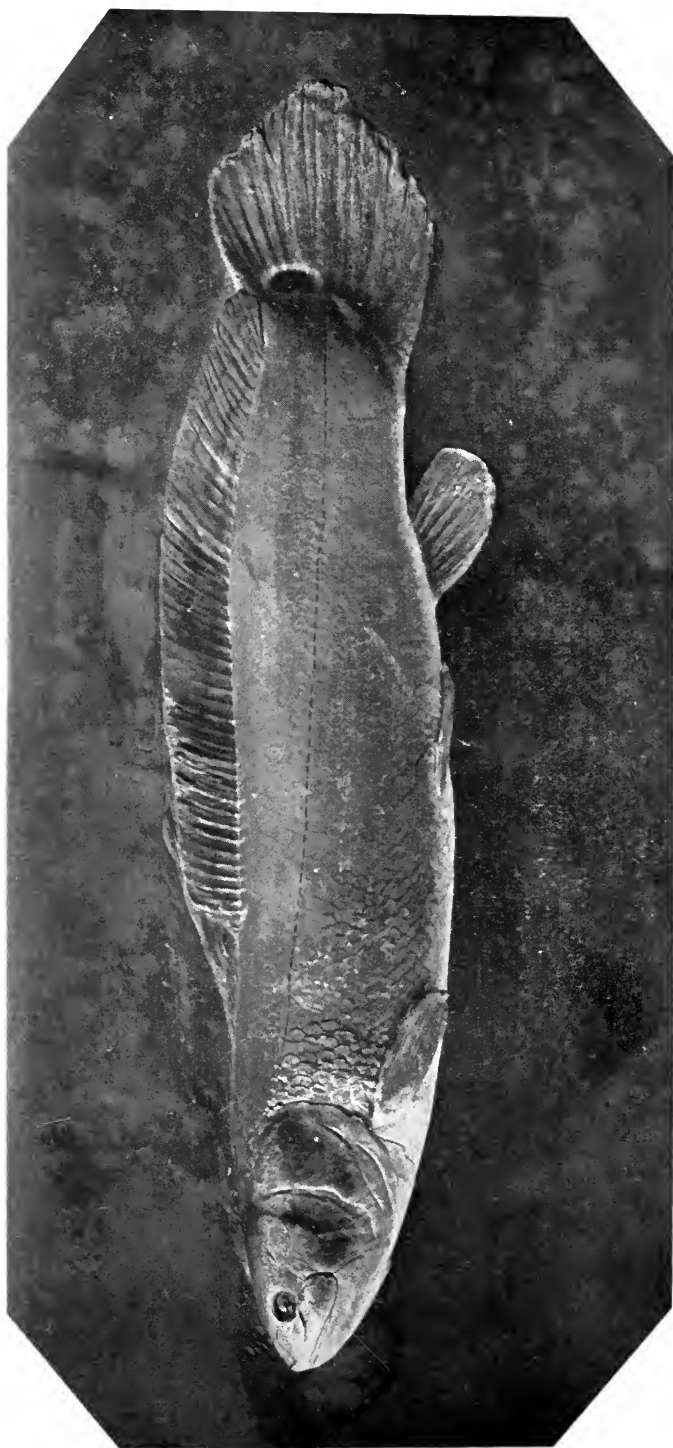
- 33738-9—Lamps used in the Lighthouse at Toronto, from 1818-1850. Gift of John Ross Robertson, Esq.
- 33740—Stone adze. Found by Frank Carrell on the beach at Wellington, Prince Edward County, gift of Wm. Carrell, Esq.
- 33741-69—Fragments of clay pottery. Gift of Rev. J. P. Hall, Brown's Town, Jamaica, May 9th, 1914.
- 33770-3—Stone axes. Gift of Rev. J. P. Hall, Jamaica.
- 33774-90—Shells. Gift of Rev. J. P. Hall, Jamaica.
- 33791-97—Small bones. Gift of Rev. J. P. Hall, Jamaica.
- 33798—Skull; found near Galt. Gift of A. B. Vardon, Esq., Galt, Ont.
- 33799-800—Bones (humerus). Gift of A. B. Vardon, Esq., Galt, Ont.
- 33801—Army water-bottle, found at Ridgeway. Mrs. M. A. Kerr, Galt, Ont.
- 33802—Stone adze, W. Nissouri Tp. Gift of L. D. Brown, Esq., St. Mary's, Ont.
- 33803—Stone adze, McKay's Creek, Nissouri Tp. Gift of L. D. Brown, Esq., St. Mary's, Ont.
- 33804—Wooden ladel, Mohawk Reserve, Grand River. Gift of L. D. Brown, Esq., St. Mary's, Ont.
- 33805—Tusk, Chicago Stock Yards. Gift of L. D. Brown, Esq., St. Mary's, Ont.
- 33806—Piece of Shell. Gift of L. D. Brown, Esq., St. Mary's Ont.
- 33807—Hatchet, North branch, Thames River, S. Perth. Gift of L. D. Brown, Esq., St. Mary's, Ont.
- 33808—Gun flint Desplains River, Ill. Gift of L. D. Brown, Esq., St. Mary's, Ont.
- 33809-13—Arrow-heads, McKay's Creek, E. Nissouri Township. Gift of L. D. Brown, Esq., St. Mary's, Ont.
- 33814—Hammer stone, Woodbridge, Ont. Gift of J. F. Orr, Esq., M.D.
- 33815-74—Bone awls. Gift of A. M. Kennedy, Esq., Weston, Ont., October, 1914.
- 33875—Ten bone beads. Gift of A. M. Kennedy, Esq., Weston, Ont., October, 1914.
- 33876—Seventy-eight teeth. Gift of A. M. Kennedy, Esq., Weston, Ont., October, 1914.
- 33877—Three hundred and sixty-five bone fragments. Gift of A. M. Kennedy, Esq., Weston, Ont., October, 1914.
- 33878—Eleven fragments of Clay pipe stems. Gift of A. M. Kennedy, Esq., Weston, Ont., October, 1914.
- 33879—Two fragments of clay pipe bowls. Gift of A. M. Kennedy, Esq., Weston, Ont., October, 1914.
- 33880—Nine hundred and twenty fragments of chert. Gift of A. M. Kennedy, Esq., Weston, Ont., October, 1914.
- 33881—Twenty-five bone beads. Gift of A. M. Kennedy, Esq., Weston, Ont., Oct., 1914.
- 33882-87—Fragments of bone needles. Gift of A. M. Kennedy, Esq., Weston, Ont., October, 1914.
- 33888-900—Bone awls. Gift of A. M. Kennedy, Esq., Weston, Ont., October, 1914.
- 33901—One hundred and seventy seven fragments of pottery. Gift of A. M. Kennedy, Esq., Weston, Ont., October, 1914.
- 33902—Sixty seven fragments of clay pipe bowls. Gift of A. M. Kennedy, Esq., Weston, Ont., October, 1914.
- 33903—One hundred and forty-four fragments of clay pipe stems. Gift of A. M. Kennedy, Esq., Weston, Ont., October, 1914.
- 33904—Seventy-eight arrow-heads. Gift of A. M. Kennedy, Esq., Weston, Ont., Oct., 1914
- 33905—Thirty-one stone chisels, adzes, etc. Gift of A. M. Kennedy, Esq., Weston, Ont., October 1914.
- 33906—Eighteen stone chisels, adzes, etc. Gift of A. M. Kennedy, Esq., Weston, Ont., October, 1914.
- 33907—Thirty-one clam shells. Gift of A. M. Kennedy, Esq., Weston, Ont., October, 1914.

- 33908—Iron wedge. Gift of A. M. Kennedy, Esq., Weston, Ont., October, 1914.
- 33909—One-hundred and one bone beads. Gift of A. M. Kennedy, Esq., Weston, Ont., October, 1914.
- 33910-63—Fragments of pottery. Gift of E. R. Steinbrueck, Mandan, N.D., U.S.A.
- 33964—Charred cob of corn (200 years old). Gift of E. R. Steinbrueck, Mandan, N.D., U.S.A.
- 33965-979—Flint specimens. Gift of E. R. Steinbrueck, Mandan, N.D., U.S.A.
- 33980—Tooth. Gift of E. R. Steinbrueck, Mandan, N.D., U.S.A.
- 33981—Bone awl. Gift of E. R. Steinbrueck, Mandan, N.D., U.S.A.
- 33982—Bone fragment. Gift of E. R. Steinbrueck, Mandan, N.D., U.S.A.
- 33983—Hide scraper. Gift of E. R. Steinbrueck, Mandan, N.D., U.S.A.
- 33984-5—Shoulder blades of buffalo; used as hide scrapers. Gift of E. R. Steinbrueck, Mandan, N.D., U.S.A.
- 33986—Squash knife. Gift of E. R. Steinbrueck, Mandan, N.D., U.S.A.
- 33987-88—Shoulder blades of buffalo; used as hide scrapers. Gift of E. R. Steinbrueck, Mandan, N.D., U.S.A.
- 33989—Stone pipe, Lot 16, Con. 3, W. Oxford. Gift of T. R. Mayberry, Esq., M.P.P.
- 33990—Stone ornament, Lincoln County, Ont. Gift of C. W. Nash, Esq.
- 33991-2—Topa cloth, Honolulu. Mrs. W. A. Orr, Los Angeles, Cal., U.S.A.
- 33993-4—Grooved axes, Montgomery Co., Pa., U.S.A. By Exchange with Jas. A. Branegan, Esq., Millbourne, Pa., U.S.A.
- 33995—Spear-head, Berks Co., Pa., U.S.A. By exchange with Jas. A. Branegan, Esq., Millbourne, Pa., U.S.A.
- 33996—Part of banner stone, Berks Co., Pa. By exchange with Jas. A. Branegan, Esq., Millbourne, Pa., U.S.A.
- 33997—Fragment of pottery, W. bank of Delaware River, Pa., U.S.A. By exchange with Jas. A. Branegan, Esq., Millbourne, Pa., U.S.A.
- 33998-34003—Fragment of pottery, W. bank of Delaware River, Pa., U.S.A. By exchange with Jas. A. Branegan, Millbourne, Pa., U.S.A.
- 34004-29—Arrow-heads, from Berks, Lehigh and Northampton Counties, Pa. By exchange with Jas. A. Branegan, Esq., Millbourne, Pa., U.S.A.
- 34030-36—Gorgetts. Middlesex County. Gift of Mrs. Minnie Graburn.
- 34037—Banner Stone. Middlesex County. Gift of Mrs. Minnie Graburn.
- 34038-41—Bird Amulets. Middlesex County. Gift of Mrs. Minnie Graburn.
- 34042—Fragment of Bird Amulet. Middlesex County. Gift of Mrs. Minnie Graburn.
- 34043-45—Large stone gouges. Middlesex County. Gift of Mrs. Minnie Graburn.
- 34046—Stone adze or axe. Middlesex County. Gift of Mrs. Minnie Graburn.
- 34047—Stone implement. Middlesex County. Gift of Mrs. Minnie Graburn.
- 34048—Bone implement. Gift of A. M. Kennedy, Esq., Weston, Ont.
- 34049—Stone axe, found on Lot 4, Con. 1, McKillop Township. Presented by Bernard O'Connell, of Dublin, Ont.
- 34050—Large round stone, probably used for gambling purposes; found at Woodbridge, and presented by Miss Merlda Orr.
- 34051-2—Gambling stones; found near Woodbridge. Miss Merlda Orr.
- 34053—Part of stone ice chisel; found near Woodbridge. Miss Merlda Orr.
- 34054—Souriguois basket; from Nova Scotia. Presented by Miss Mary Cullum.
- 34055—Stone axe, Vaughan Tp., Con. 7, Lot 15. Dr. R. B. Orr.
- 34056—Stone gouge, Lot 12, Con. 6, Vaughan Tp. Dr. R. B. Orr.
- 34057-8—Slate gorgets. Vaughan Township. Dr. R. B. Orr.
- 34059—Small stone axe. Con. 6, Vaughan Tp., Malloy's Farm. Dr. R. B. Orr.
- 34060—Heavy pottery. Vaughan Tp., Dr. R. B. Orr.
- 34061—Bone awl. Con. 7, Vaughan Tp. Dr. R. B. Orr.
- 34062-171—Flints. Vaughan Tp. Dr. R. B. Orr.
- 34172—Corn cobs, found near Weston, Ont. A. M. Kennedy, Esq.
- 34173—Bone awls and beads, found near Weston, Ont. A. M. Kennedy, Esq.

- 34174-7—Four specimens of net sinkers found on Rowe's Island, in the Columbia River, $2\frac{1}{4}$ miles below Pasca and $\frac{3}{4}$ of a mile above the mouth of the Snake River; Franklin County. Washington. Presented by Earle O. Roberts, Esq., March 14th, 1914.
- 34178—Model Eskimo kayak. By exchange with W. J. Graburn, Esq.
- 34179—Model Eskimo kayak. By exchange with W. J. Graburn, Esq.
- 34180—Model Eskimo sealing boat. By exchange with W. J. Graburn, Esq.
- 34181—Eskimo dog whip. By exchange with W. J. Graburn, Esq.
- 34182—One bone reloading tool (Eskimo). By exchange with W. J. Graburn, Esq.
- 34183—Fish spear (Eskimo). By exchange with W. J. Graburn, Esq.
- 34184—Eskimo arrow quiver. By exchange with W. J. Graburn, Esq.
- 34185—Eskimo bone pointed arrow. By exchange with W. J. Graburn, Esq.
- 34186—Eskimo bone pointed arrow. By exchange with W. J. Graburn, Esq.
- 34187—Eskimo metal and bone pointed arrow. By exchange with W. J. Graburn, Esq.
- 34188-9—Model Eskimo harpoons with toggle head. By exchange with W. J. Graburn, Esq.
- 34190—One arrow steel point (modern). By exchange with W. J. Graburn, Esq.
- 34191—One arrow flint point (modern). By exchange with W. J. Graburn, Esq.
- 34192-206—Stone adzes. Nottawasaga Tp. Presented by C. A. H. Clark, Esq.
- 34207-222—Stone adzes. Floss Tp. Presented by C. A. H. Clark, Esq.
- 34223-248—Stone adzes. Nottawasaga Tp. Presented by C. A. H. Clark, Esq.
- 34249-263—Stone axes. Floss Tp. Presented by C. A. H. Clark, Esq.
- 34264-279—Stone axes. Vespra Tp. Presented by C. A. H. Clark, Esq.



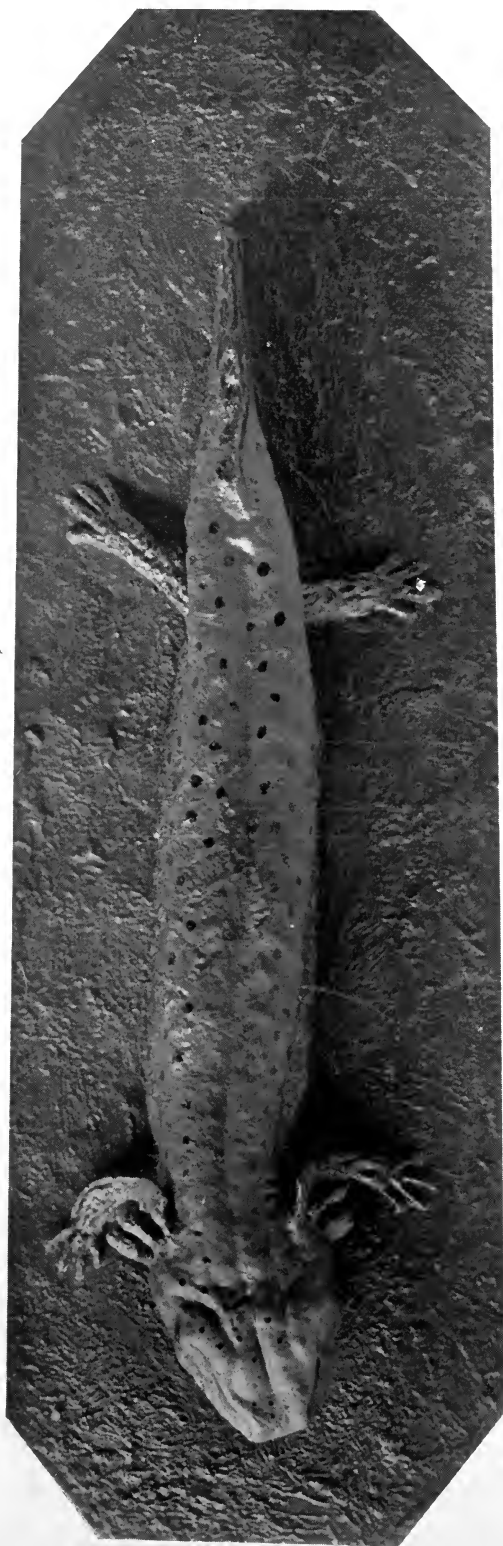
CAST OF SPOTTED SALAMANDER. (*Amblystoma punctatum*.)



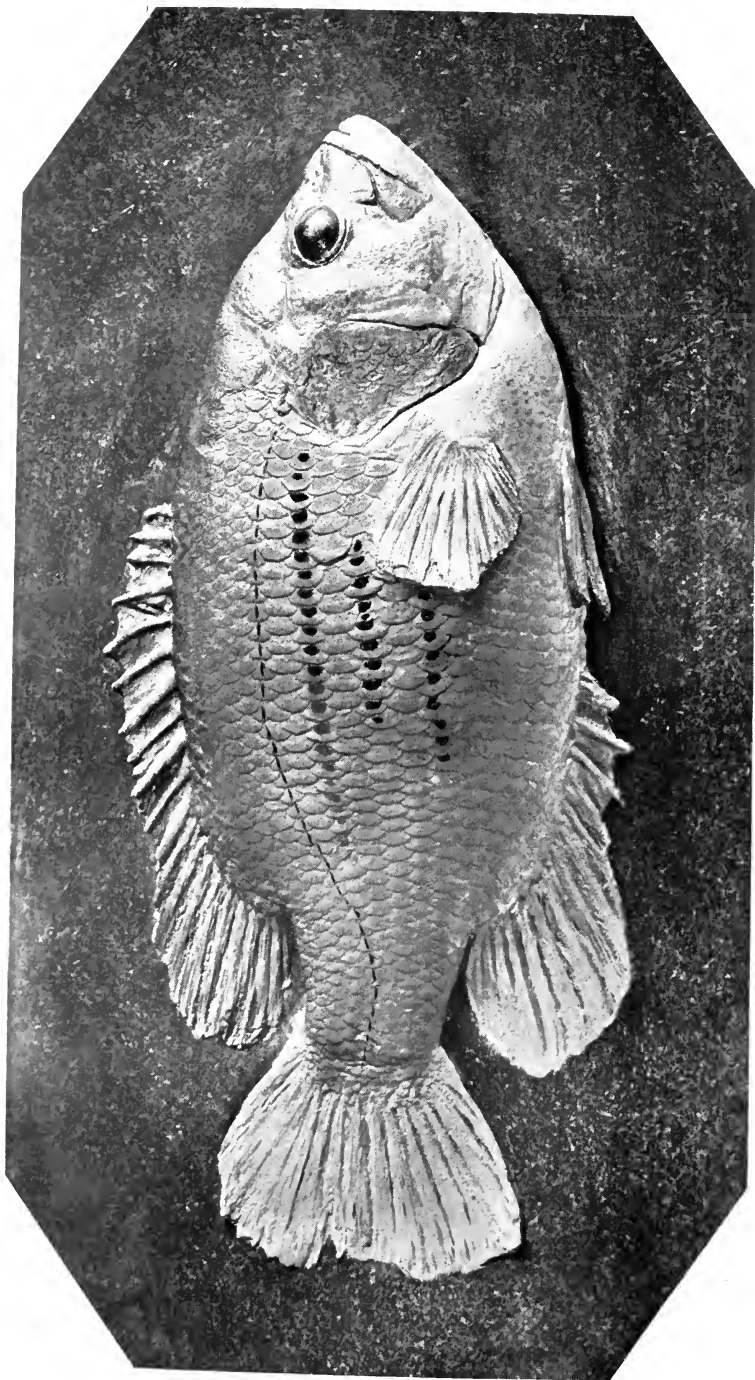
CAST OF DOGFISH. (*Amia calva*.)



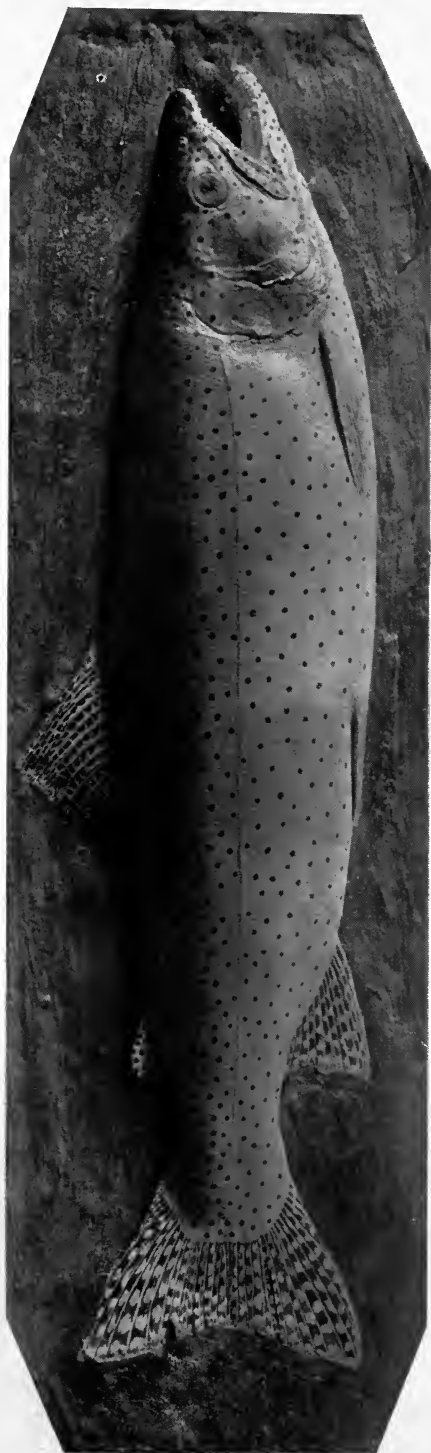
CAST OF GREEN FROG. (*Rana clamitans*.)



CAST OF MUD PUPPY. (*Necturus maculosus*.)



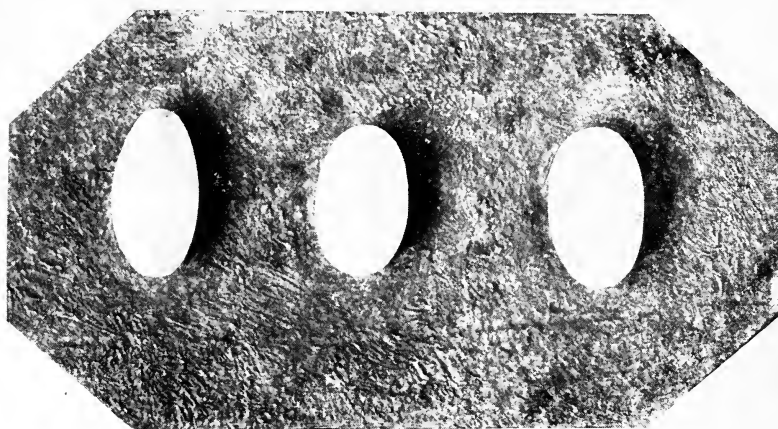
CAST OF ROCK BASS. (*Ambloplites rupestris*.)



CAST OF RAINBOW TROUT. (*Introduced.*)
(*Salmo irideus.*)
Specimen taken at Sault Ste. Marie.



CAST OF PAINTED TURTLE. (*Chrysemys picta*.)



TURTLE EGGS.



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